

SONY®

VIDEOCODER

BVH-2000PS BVH-2180PS



BVH-2000PS

The function control panel, side panels and handles in this photograph shown are optionally available.

Le panneau de contrôle des fonction, les panneaux latéraux et les poignées présentés sur cette photographie sont disponibles comme équipements en option.

Das hier abgebildete Bedienungspult, die Seitenteile und die Griffe sind gesondert lieferbares Zubehör.



OPERATION AND MAINTENANCE MANUAL

Volume 2 3rd Edition (Revised 9)

BVH-2000PS Serial No. 33401 and Higher

BVH-2180PS Serial No. 10001 and Higher

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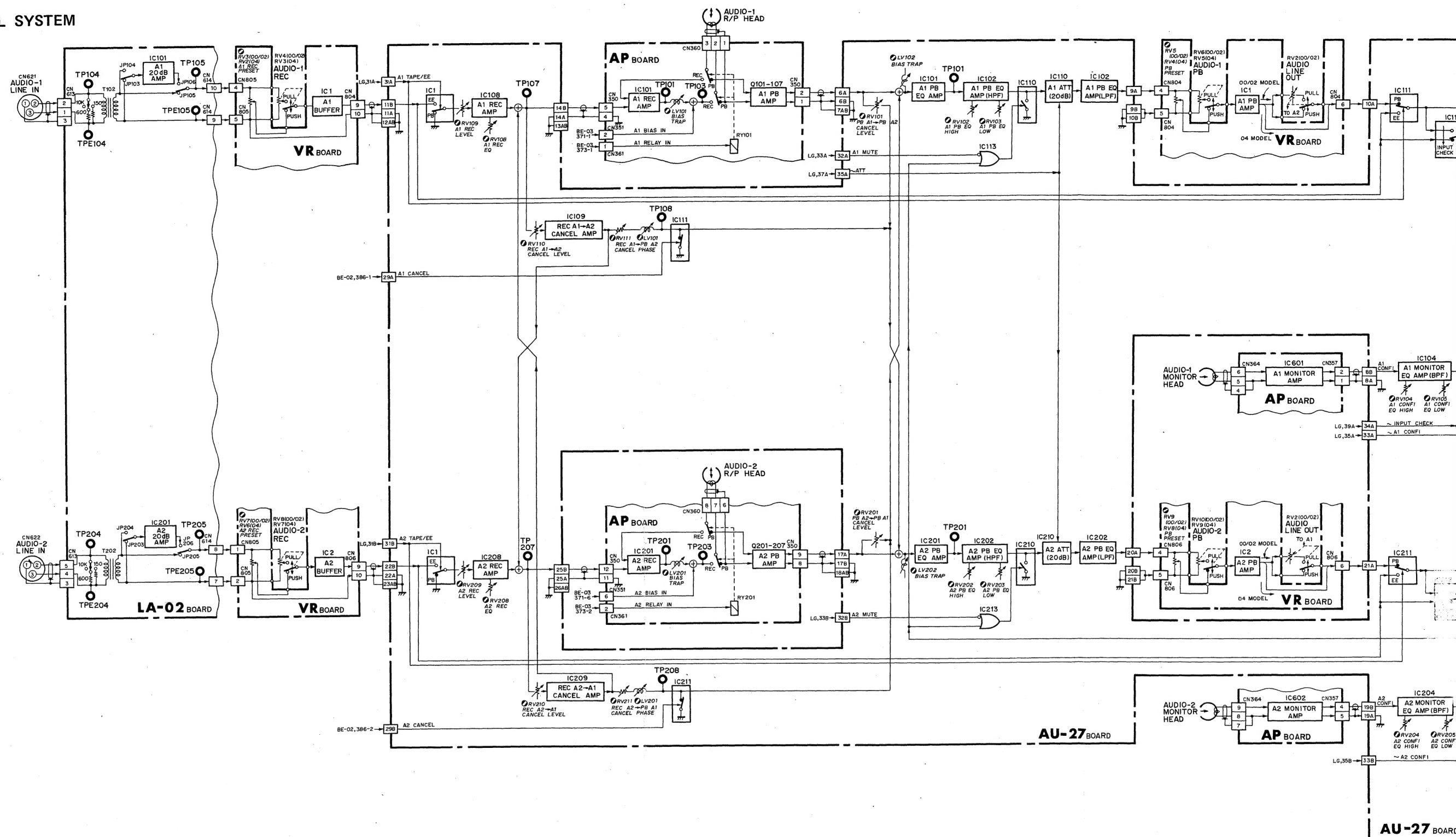
CONNECTOR PANEL

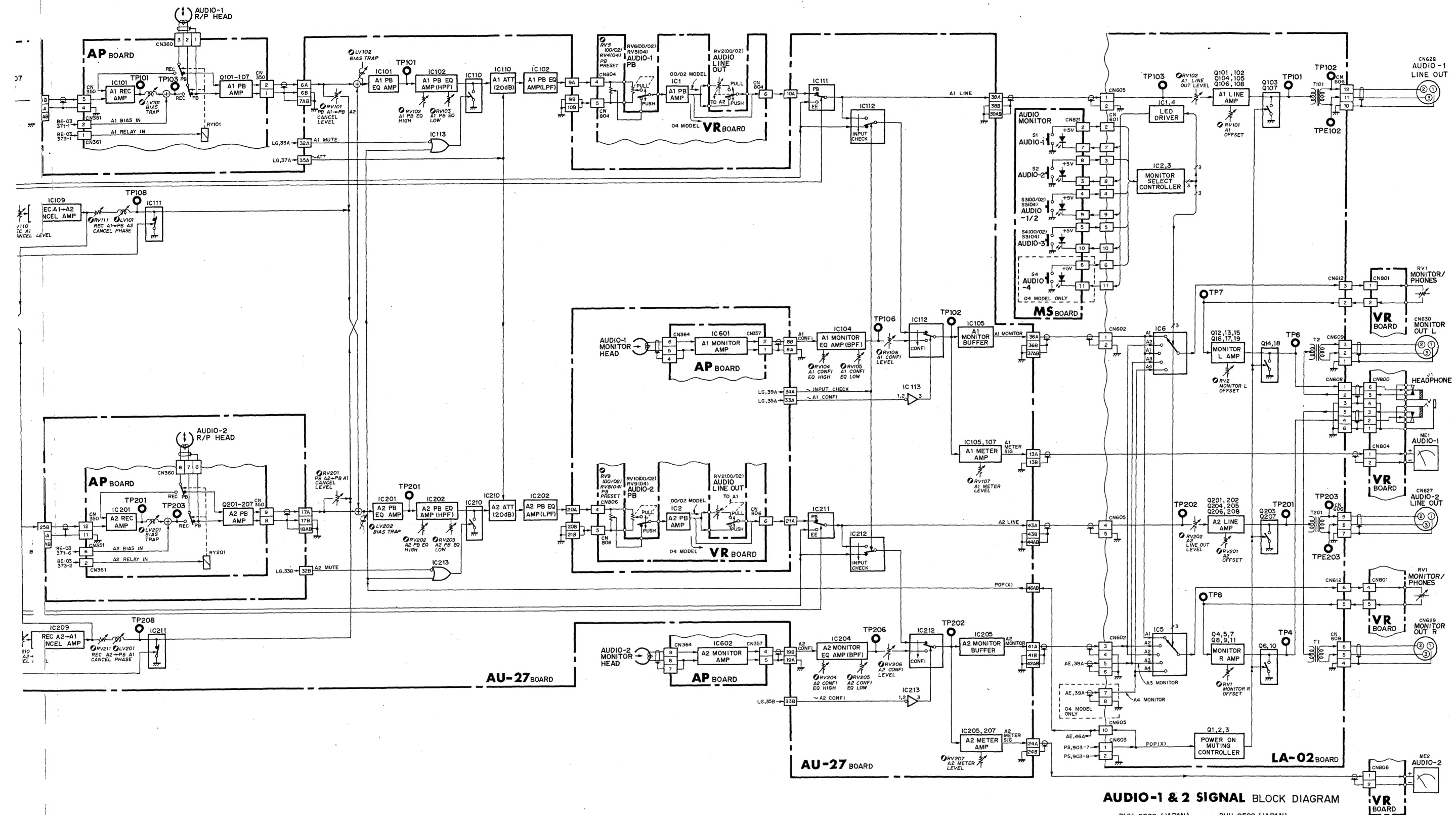
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E. CHANGED PARTS

AUDIO-1 & 2 SIGNAL SYSTEM

AU-27 BOARD
AP BOARD
LA-02 BOARD
VR BOARD
MS BOARD

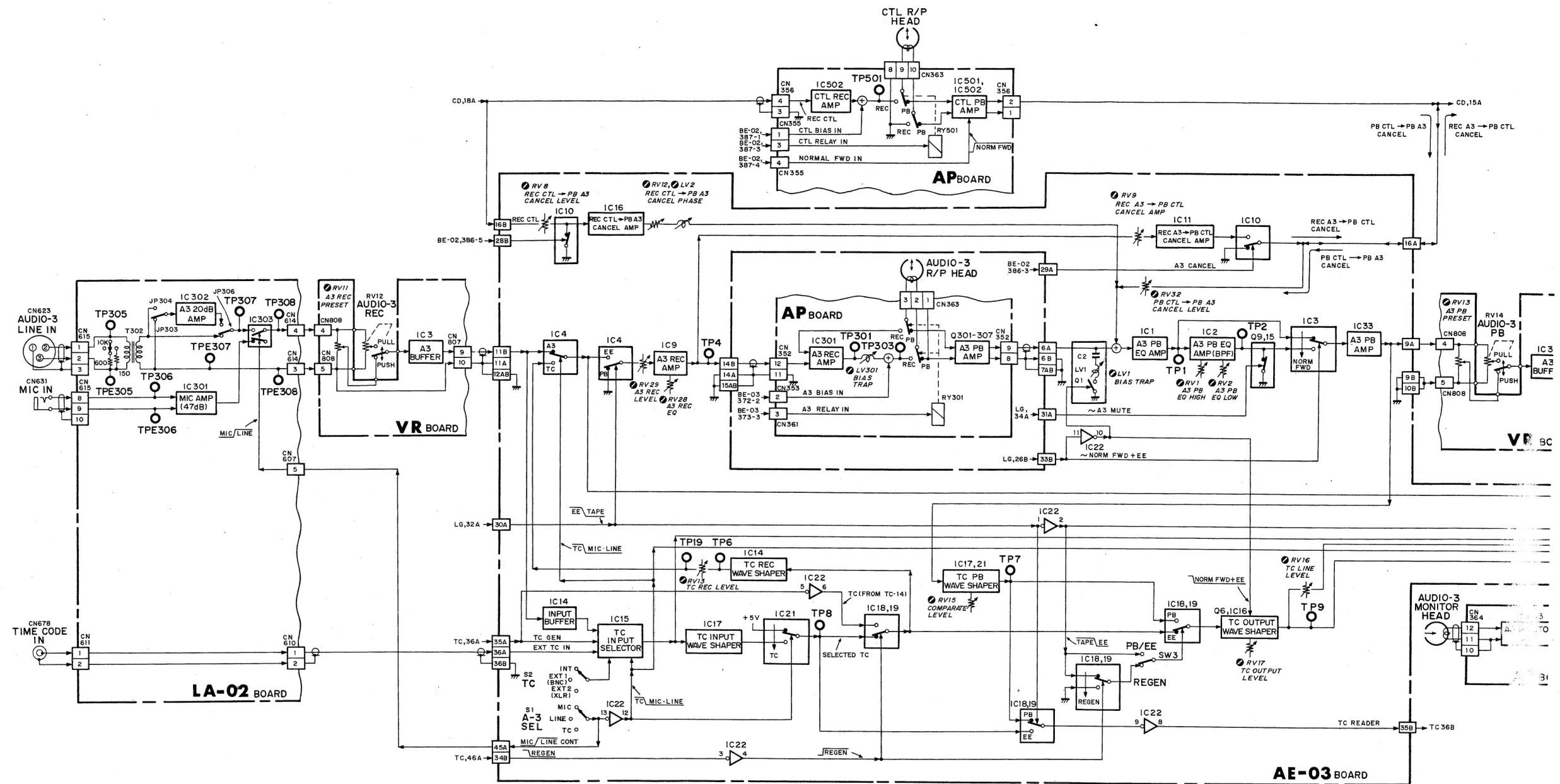


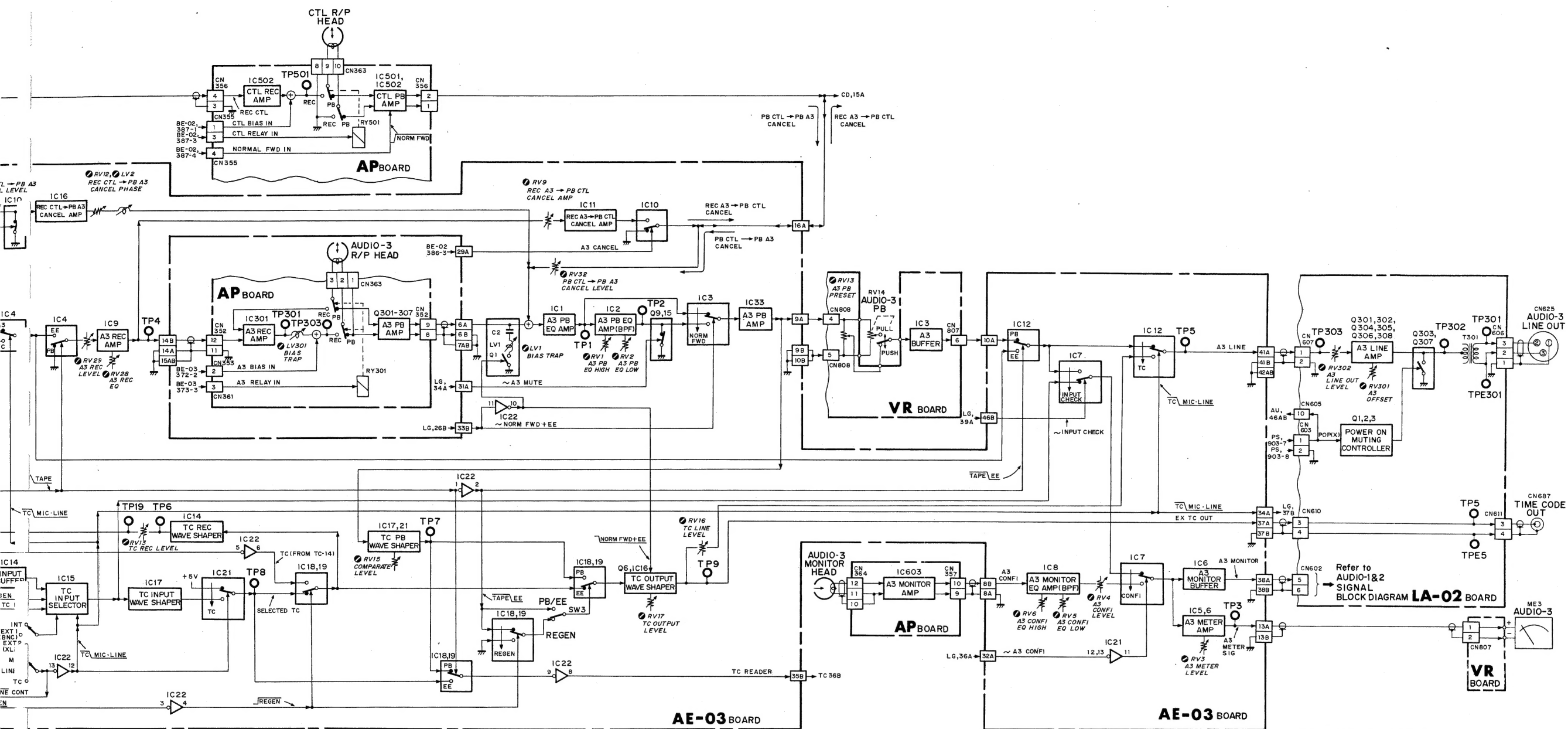
AUDIO-1 & 2 SIGNAL BLOCK DIAGRAM

BVH-2000 (JAPAN) BVH-2500 (JAPAN)
 BVH-2000 (US/CANADA) BVH-2500 (US/CANADA)
 BVH-2000PS (AEP) BVH-2500PS (AEP)
 BVH-2000PM (BRZ) BVH-2500PM (BRZ)
 BVH-2180 (JAPAN) BVH-2180 (US/CANADA)
 BVH-2180PS (AEP) BVH-2180PS (BRZ)

AUDIO-3 SIGNAL SYSTEM

AE-03 BOARD
AP BOARD
LA-02 BOARD
VR BOARD





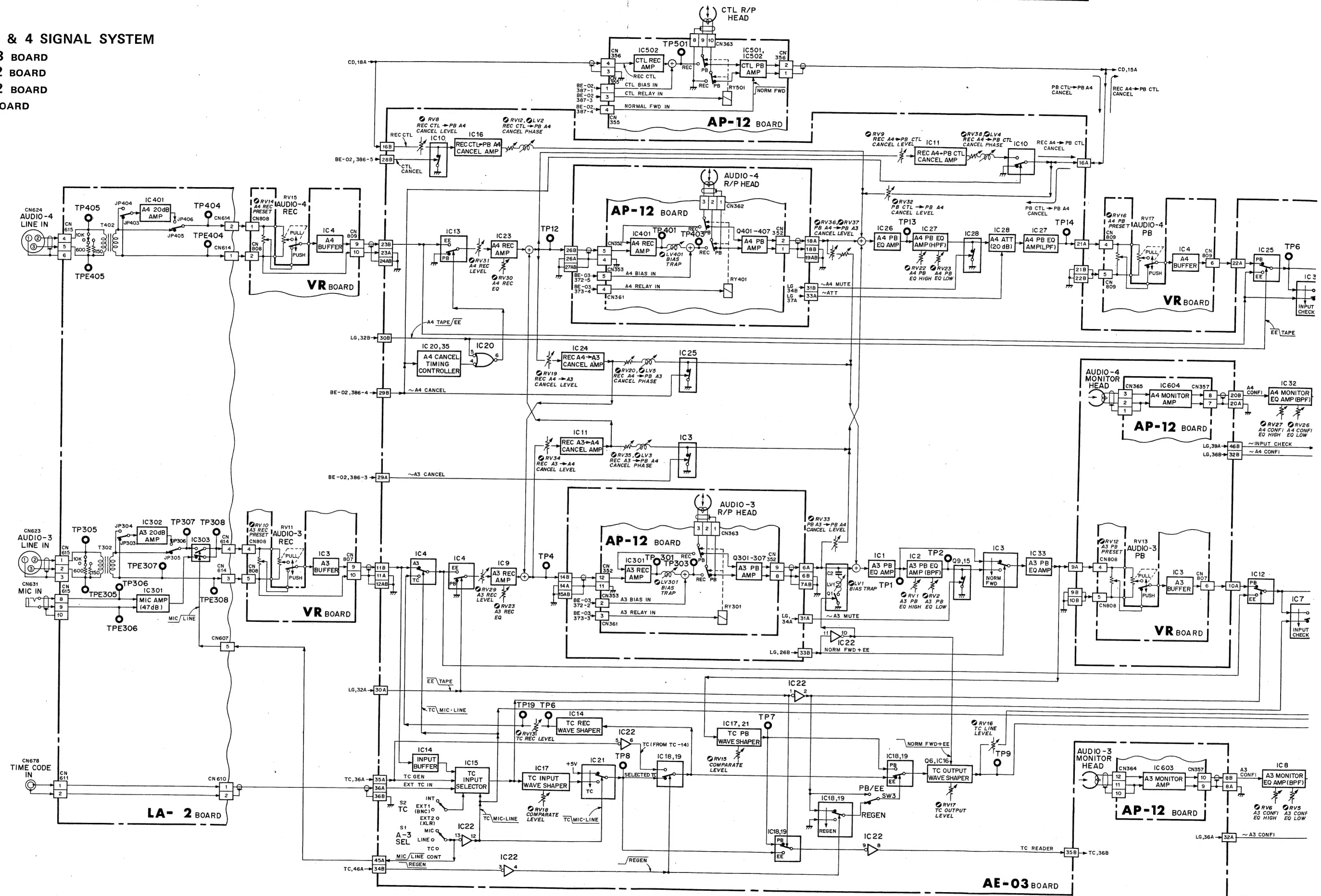
AUDIO-3 SIGNAL CTL REC/PB AMP TC SELECT

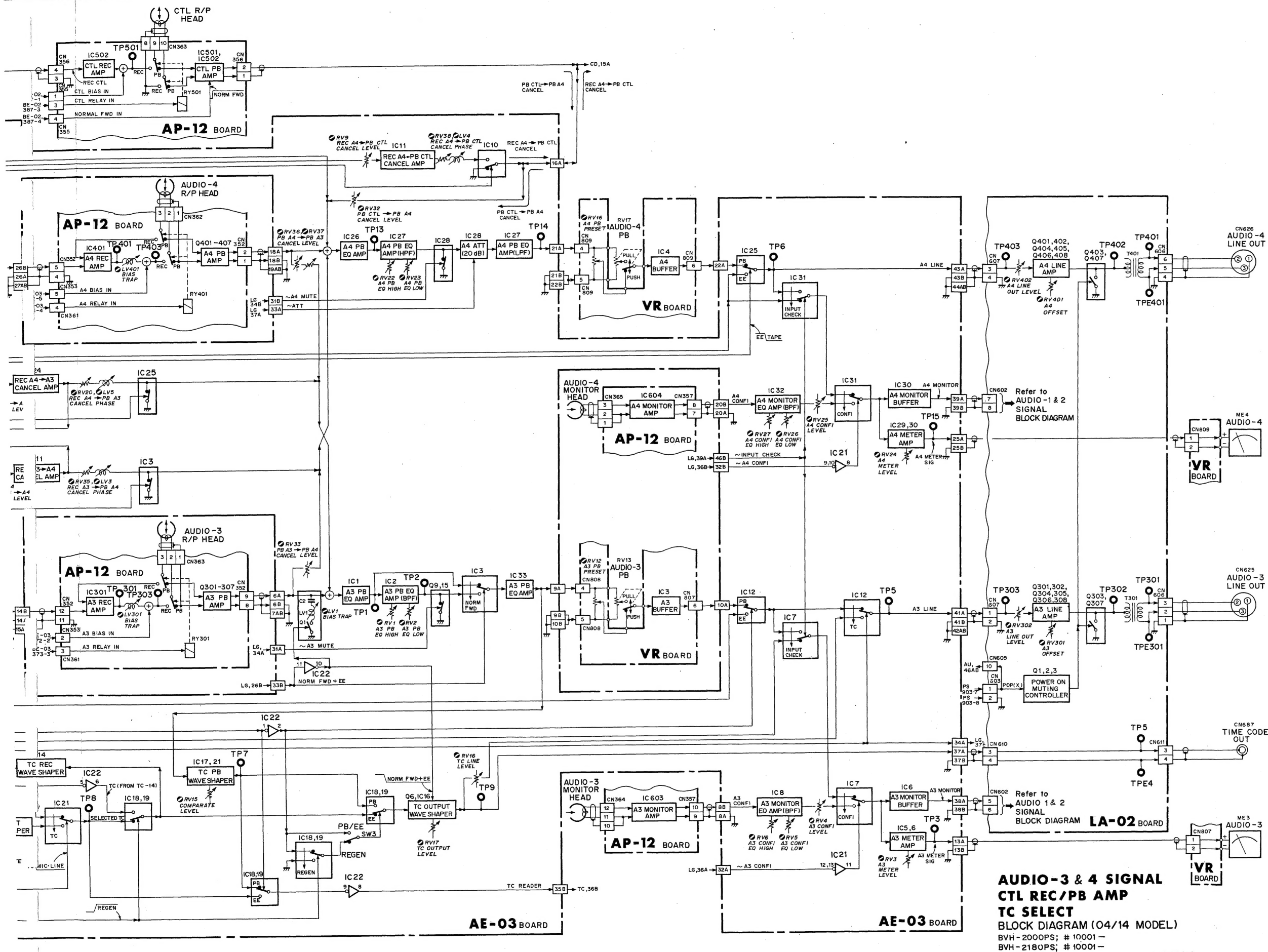
BLOCK DIAGRAM (00/10/02/12 MODEL)

BVH-2000(J) ;# 10501-	BVH-2500(J) ;# 10001-
BVH-2000(U/C) ;# 10501-	BVH-2500(U/C) ;# 10001-
BVH-2000PS ;# 10301-	BVH-2500P ;# 10001-
BVH-2000PM ;# 10001-	
BVH-2180(J) ;# 10001-	
BVH-2180(U/C) ;# 10001-	
BVH-2180PS ;# 10001-	
BVH-2180PM ;# 10001-	

AUDIO-3 & 4 SIGNAL SYSTEM

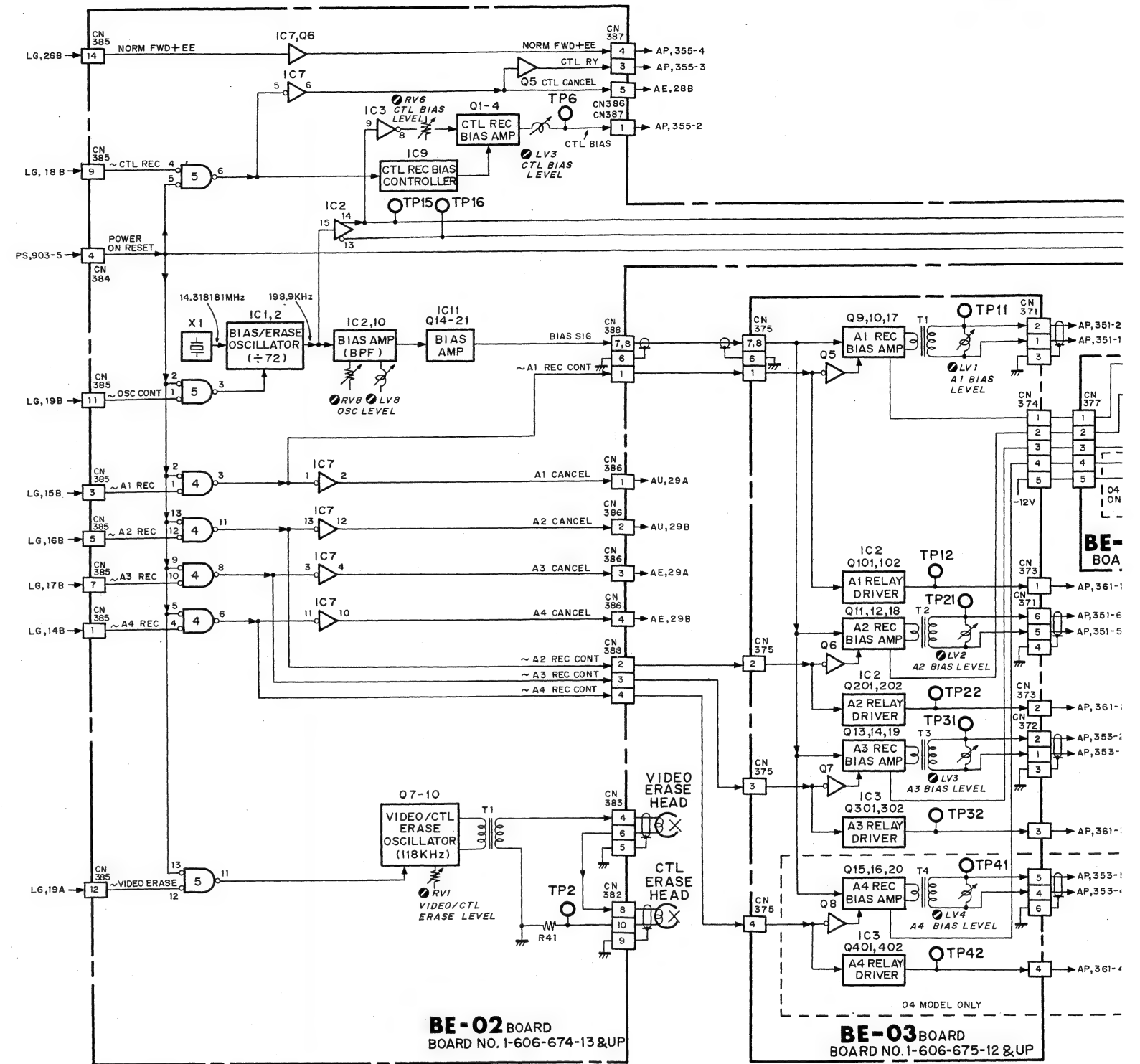
AE-03 BOARD
AP-12 BOARD
LA-02 BOARD
VR BOARD

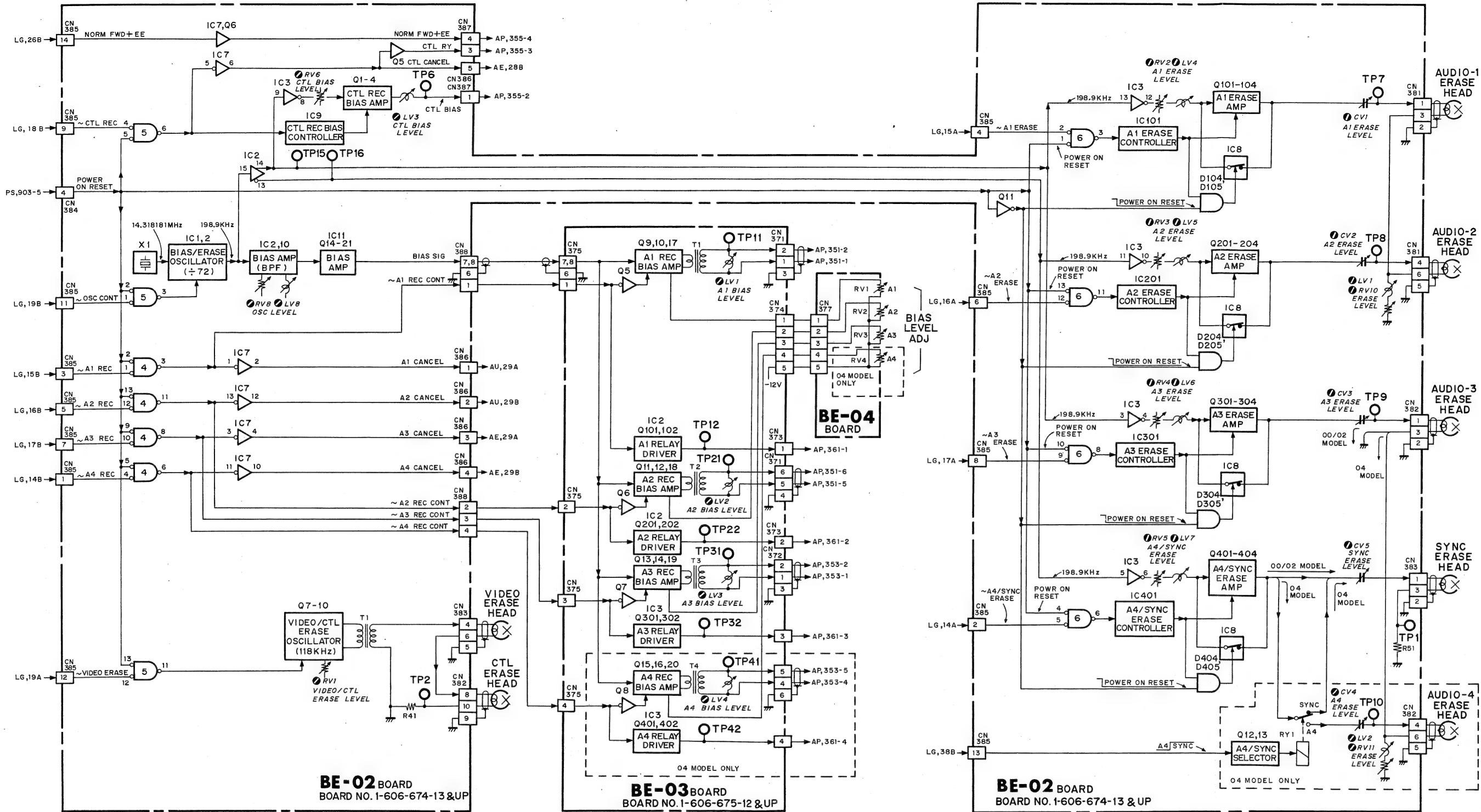




**AUDIO-3 & 4 SIGNAL
CTL REC/PB AMP
TC SELECT
BLOCK DIAGRAM (04/14 MODEL)**
BVH-2000PS; # 10001-
BVH-2180PS; # 10001-

BIAS/ERASE
BE-02 BOARD
BE-03 BOARD
BE-04 BOARD





AUDIO BIAS/ERASE AMP

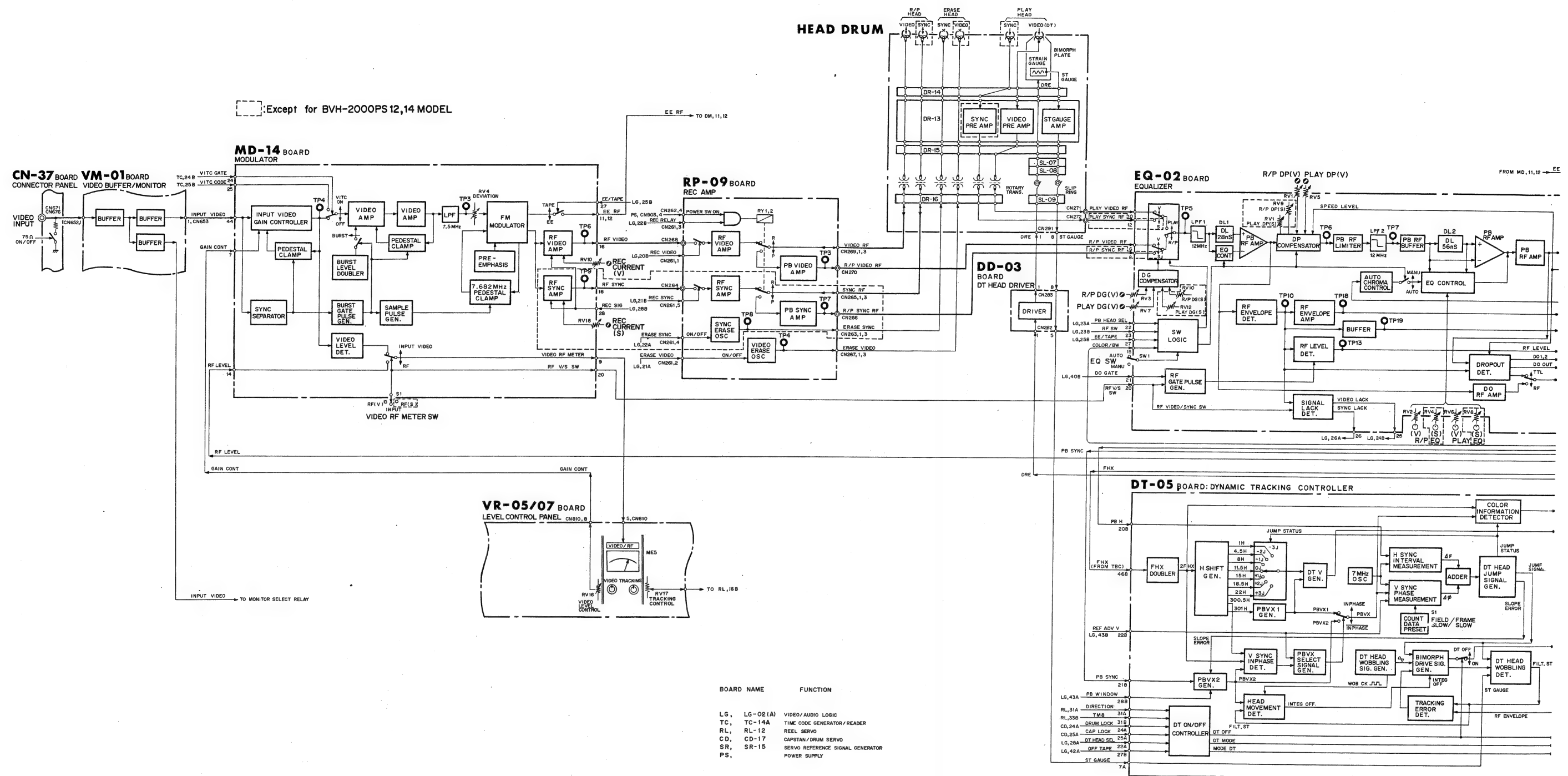
VIDEO ERASE AMP

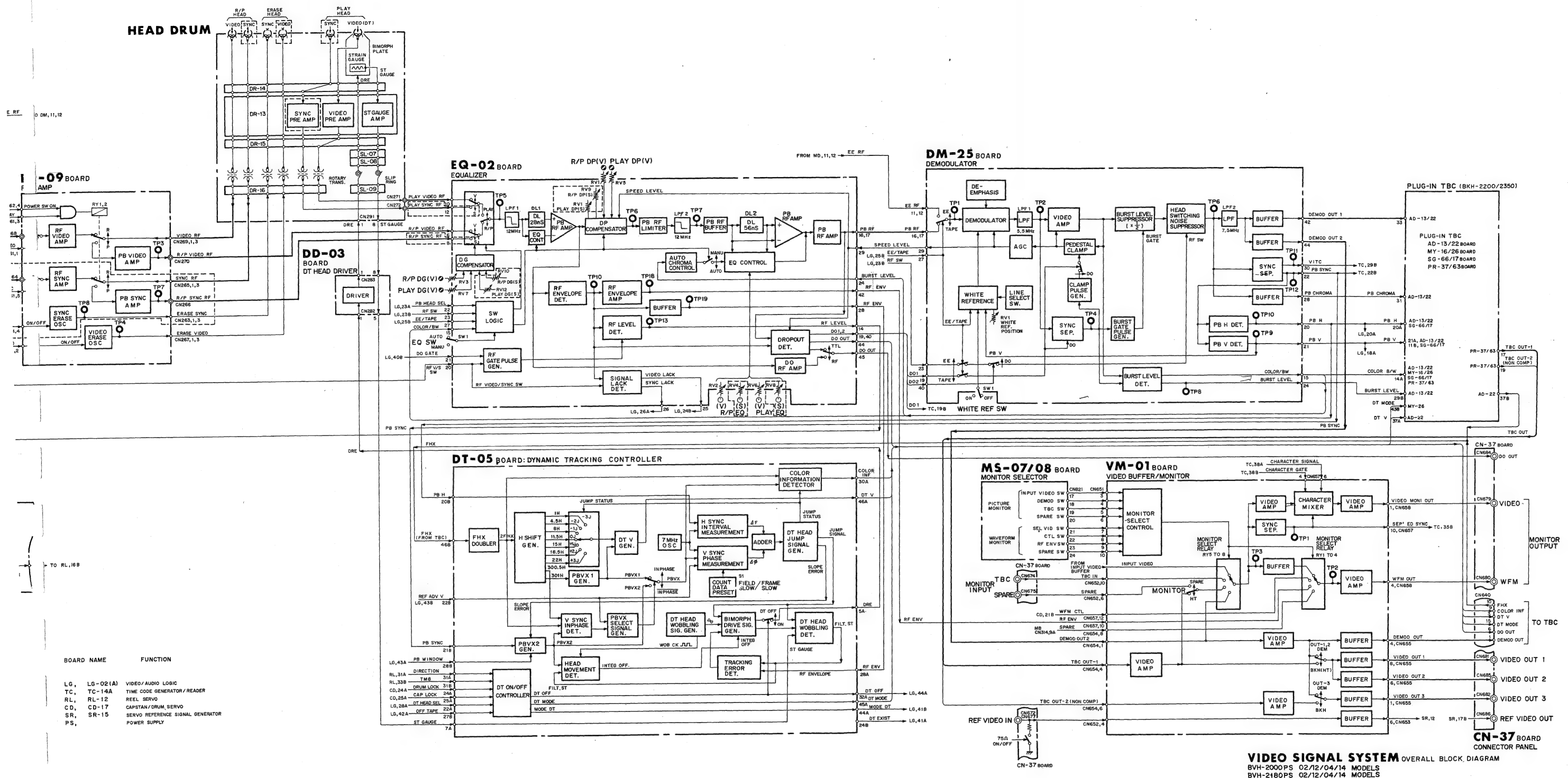
BLOCK DIAGRAM

BVH-2000(J)	;;# 10501-	BVH-2500(J)	;;# 10001-
BVH-2000(U/C)	;;# 10501-	BVH-2500(U/C)	;;# 10001-
BVH-2000PS	;;# 10301-	BVH-2500P	;;# 10001-
BVH-2000PM	;;# 10001-		
BVH-2180(J)	;;# 10001-		
BVH-2180(U/C)	;;# 10001-		
BVH-2180PS	;;# 10001-		
BVH-2180PM	;;# 10001-		

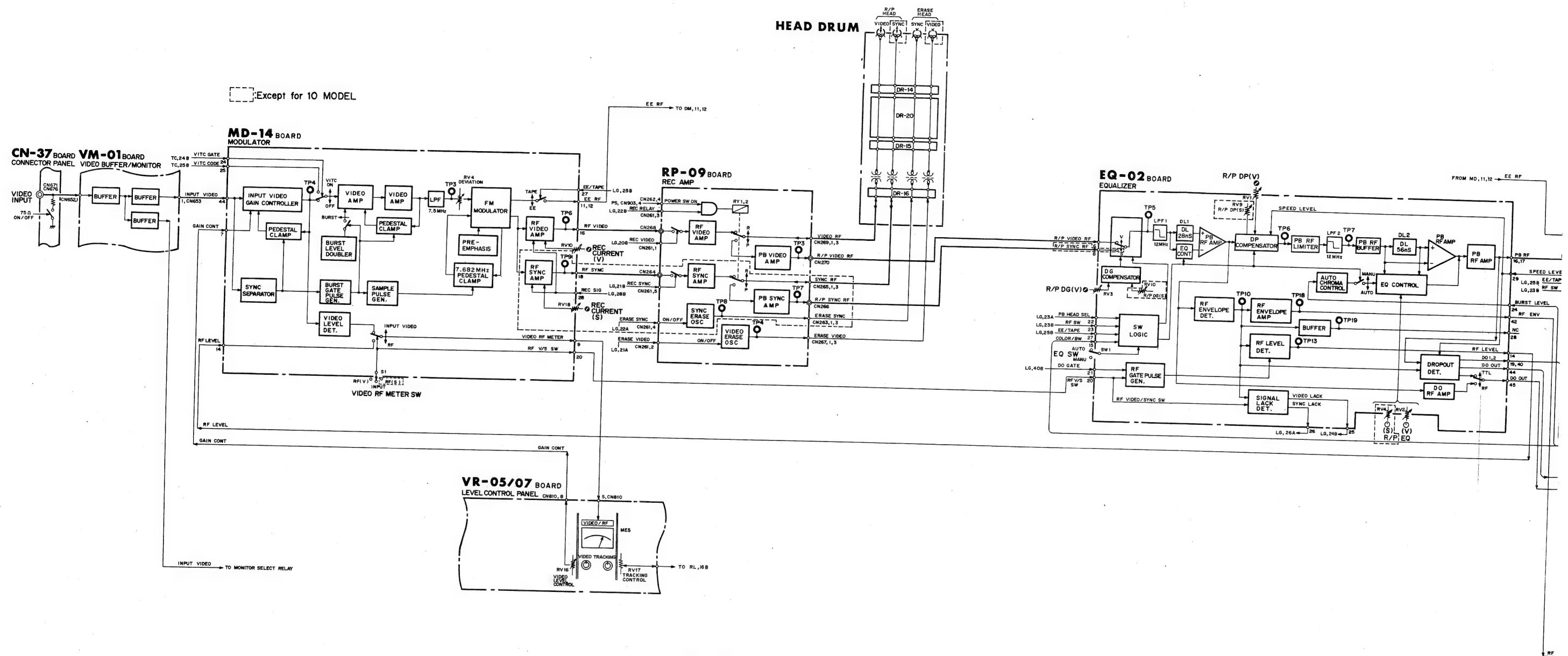
VIDEO SIGNAL SYSTEM OVERALL BLOCK DIAGRAM

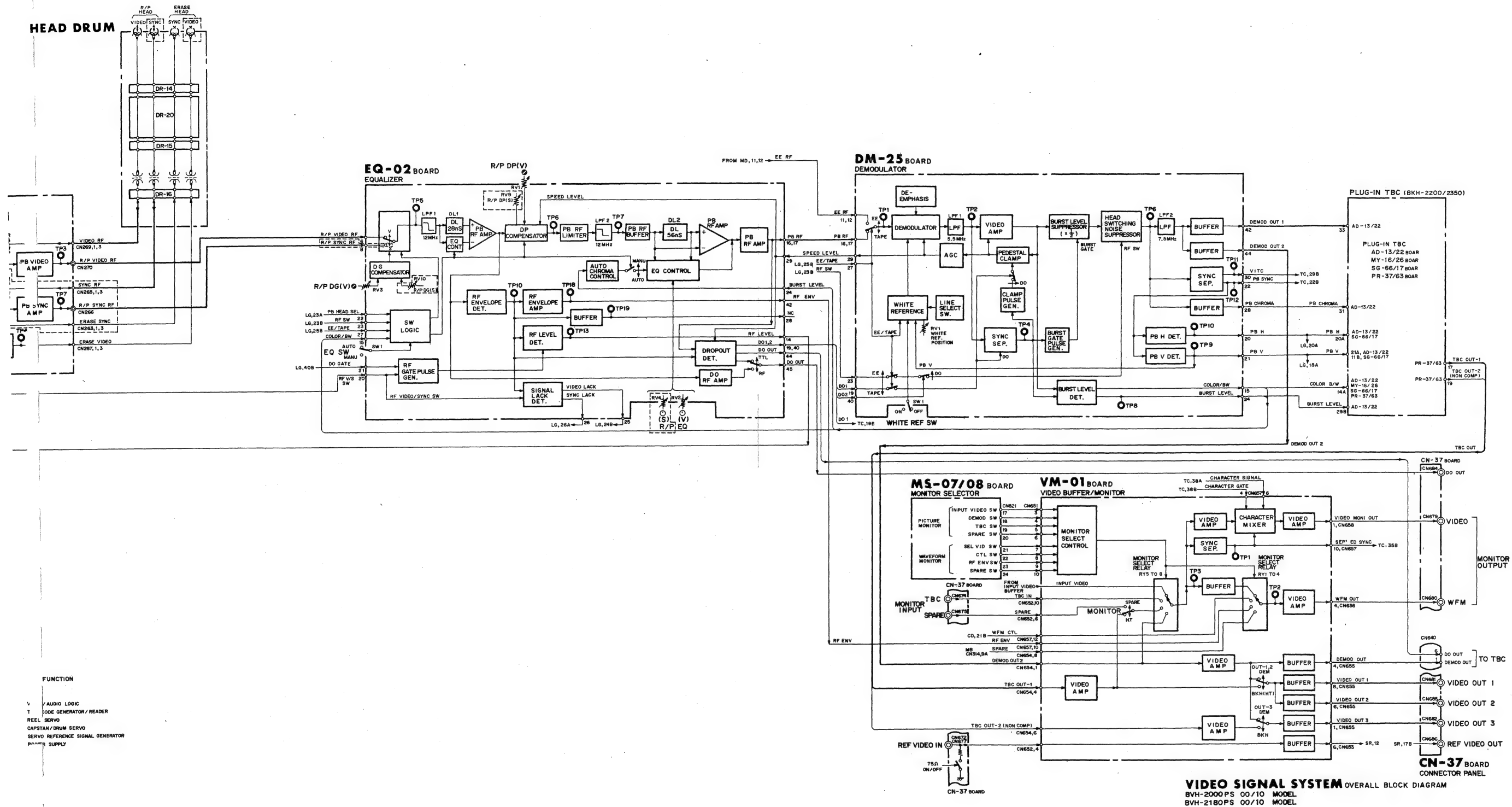
FOR 02/12/04/14 MODELS





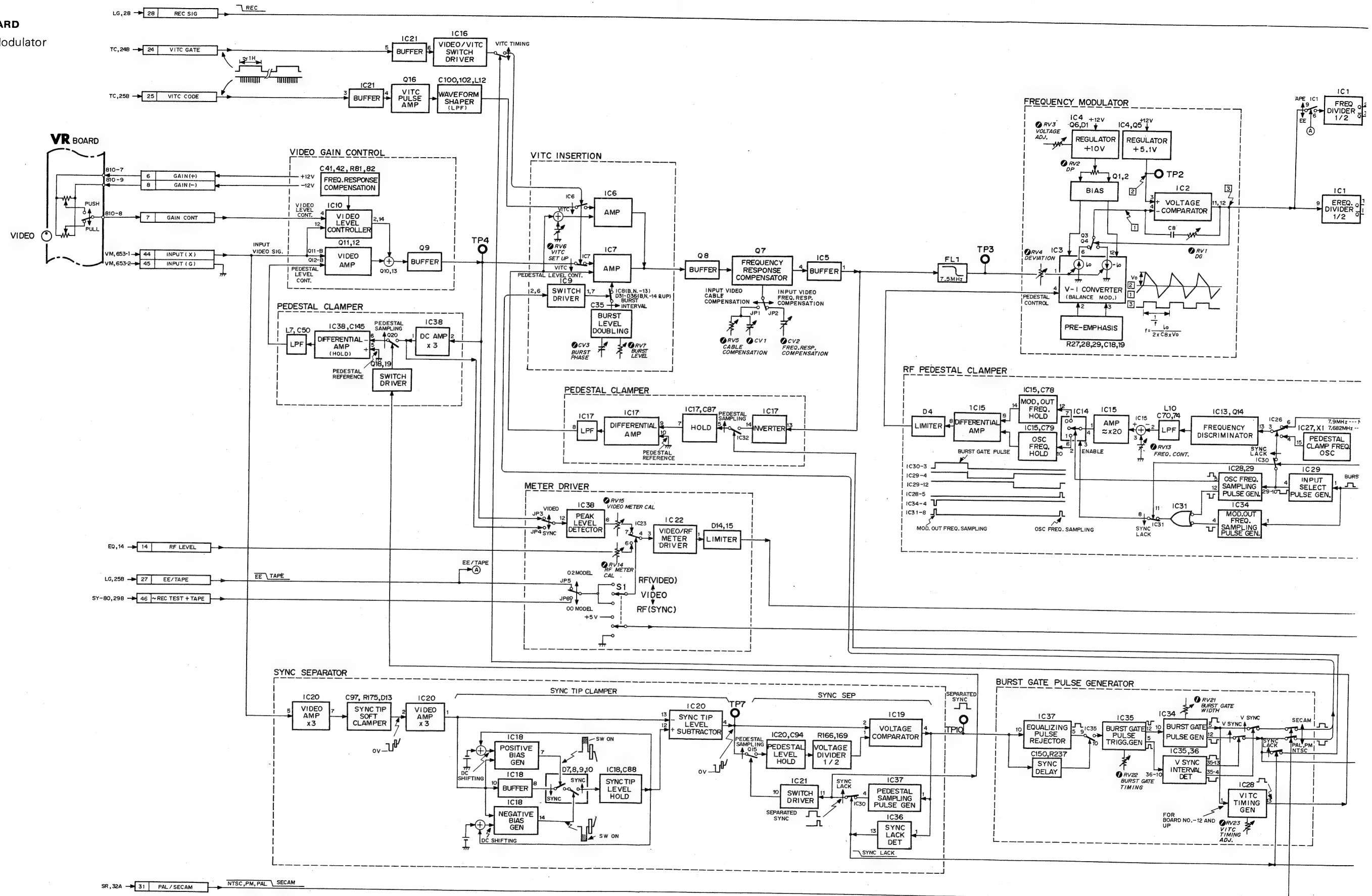
VIDEO SIGNAL SYSTEM OVERALL BLOCK DIAGRAM; FOR 00/10 MODEL

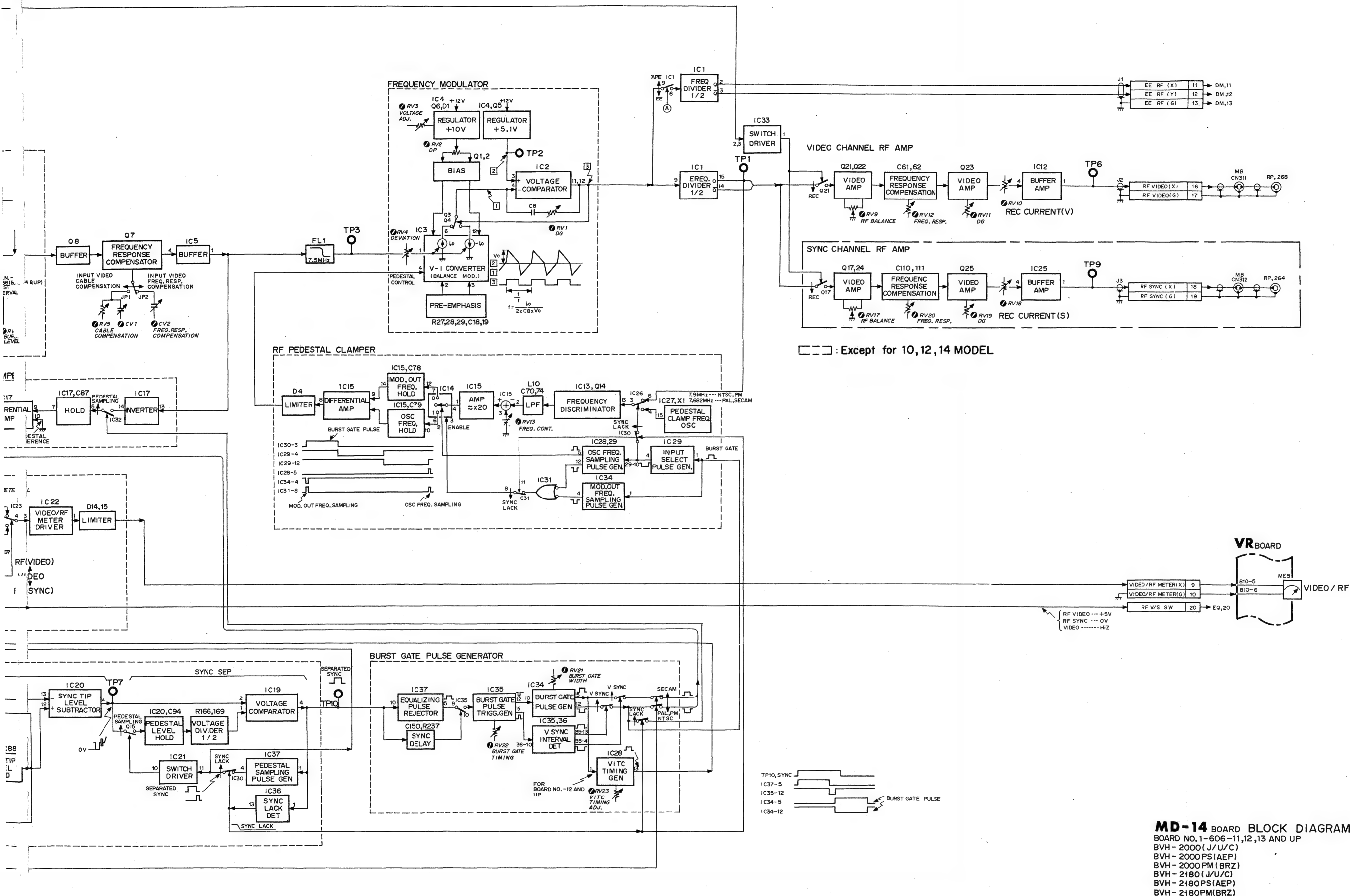




MD-14 BOARD

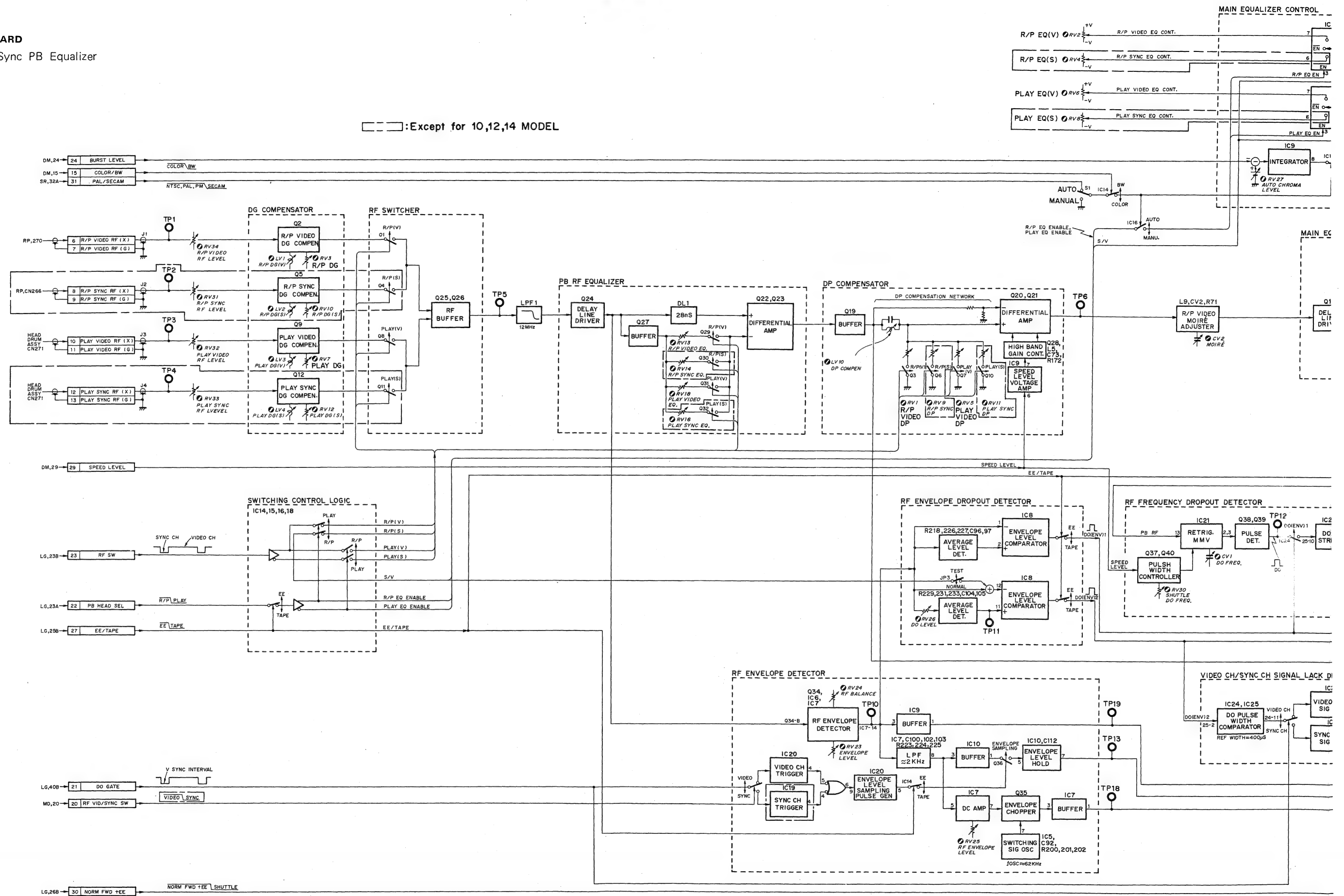
Video Modulator



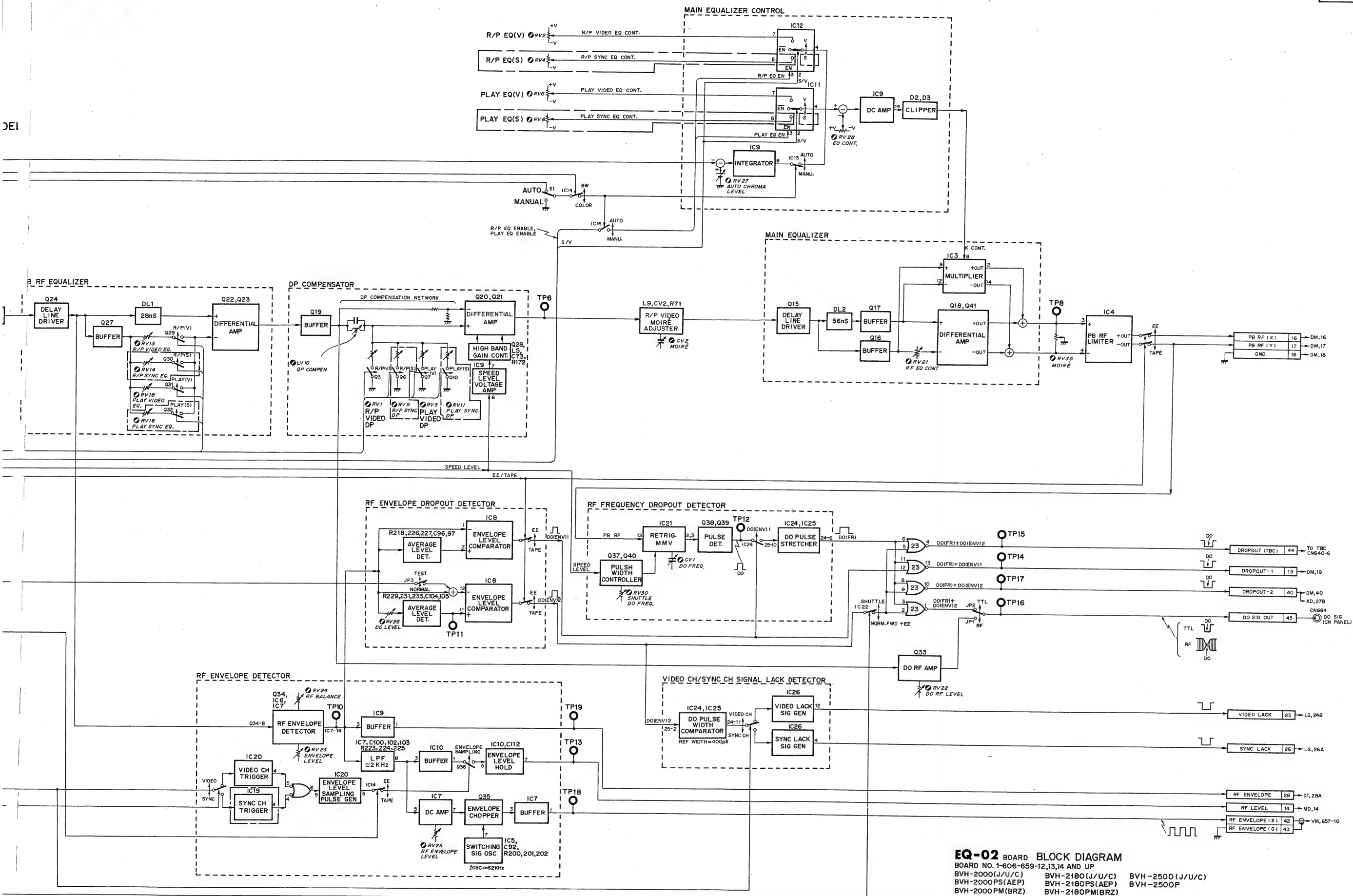


MD-14 BOARD BLOCK DIAGRAM
 BOARD NO. 1-606-11, 12, 13 AND UP
 BVH-2000(J/U/C)
 BVH-2000PS(AEP)
 BVH-2000PM(BRZ)
 BVH-2180(J/U/C)
 BVH-2180PS(AEP)
 BVH-2180PM(BRZ)

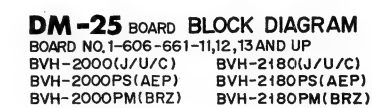
Video/Sync PB Equalizer



DEI

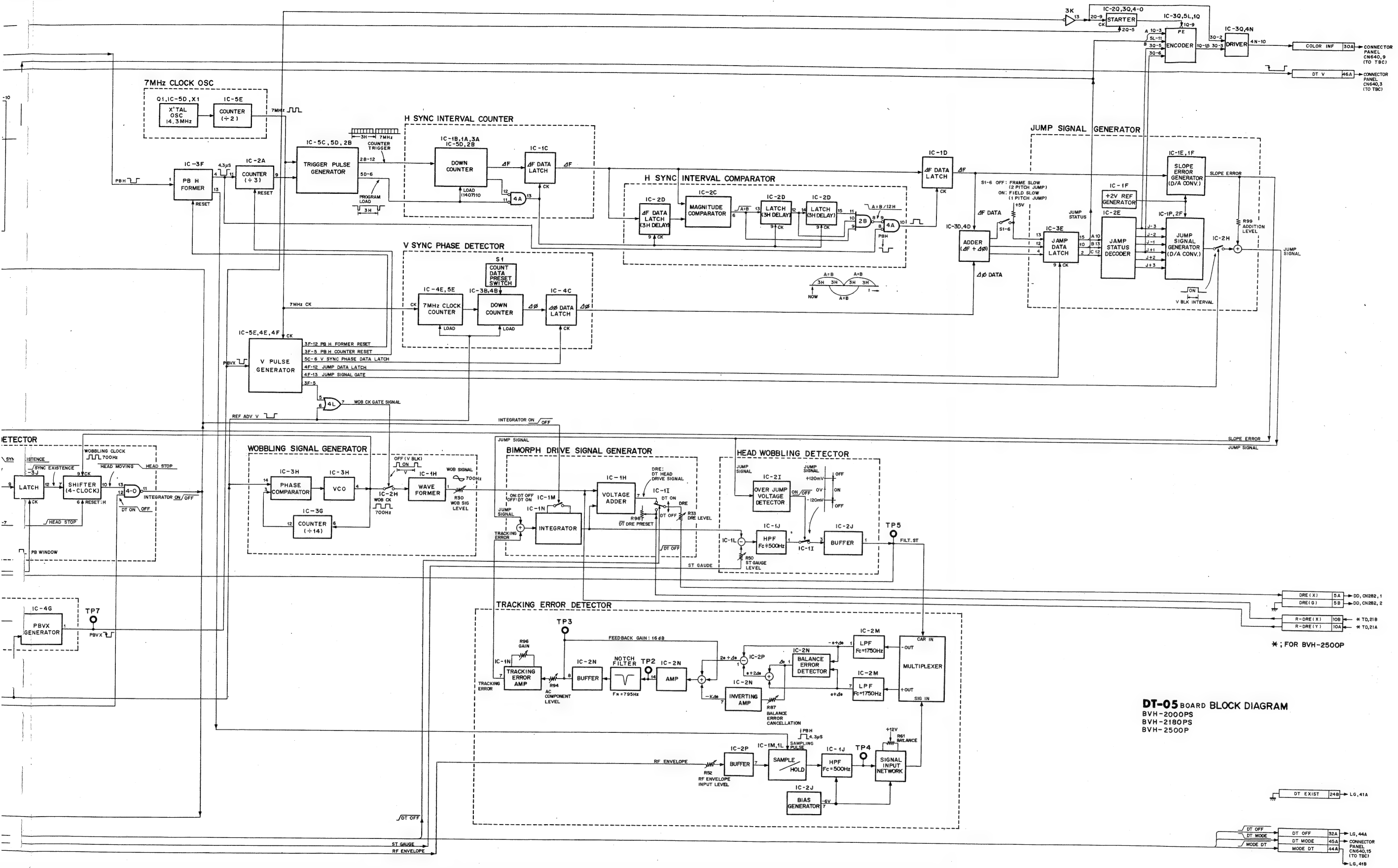


EQ-02 BOARD BLOCK DIAGRAM
 BOARD NO. 1-606-659-12,13,14 AND UP
 BVH-2000(J/U/C) BVH-2180(J/U/C) BVH-2500(J/U/C)
 BVH-2000PS(AEP) BVH-2180PS(AEP) BVH-2500P
 BVH-2000PM(BRZ) BVH-2180PM(BRZ)

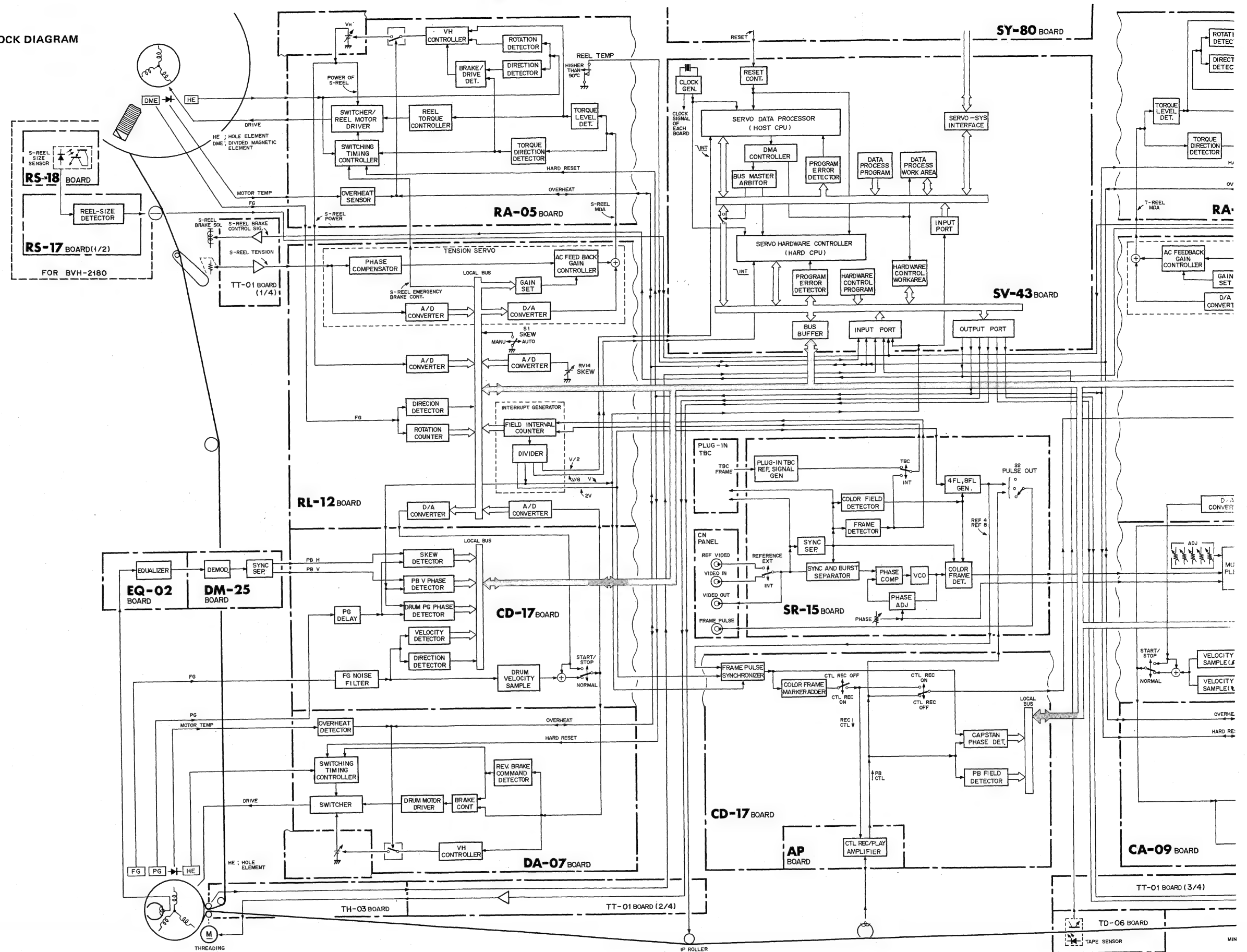


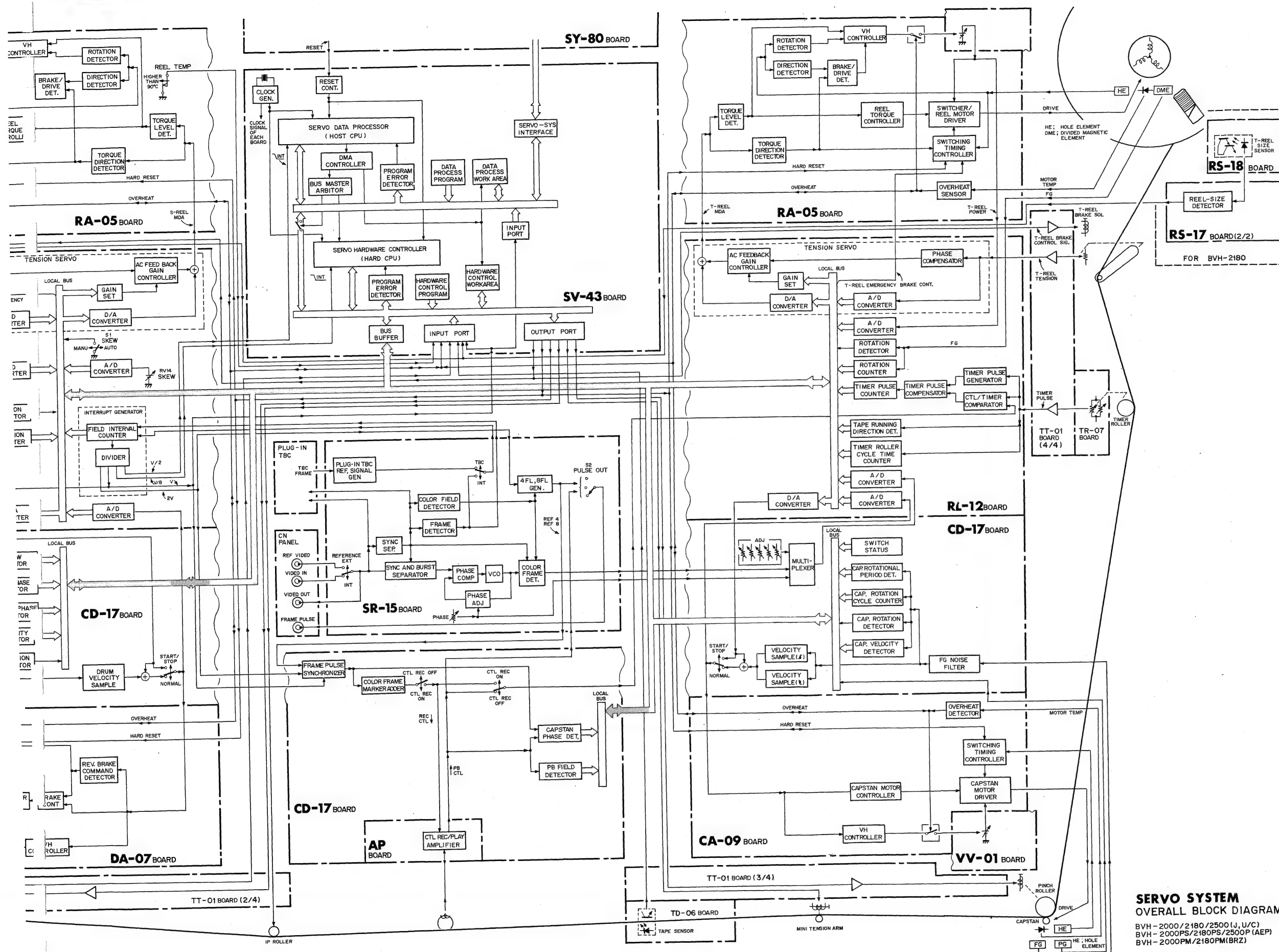
DT Control





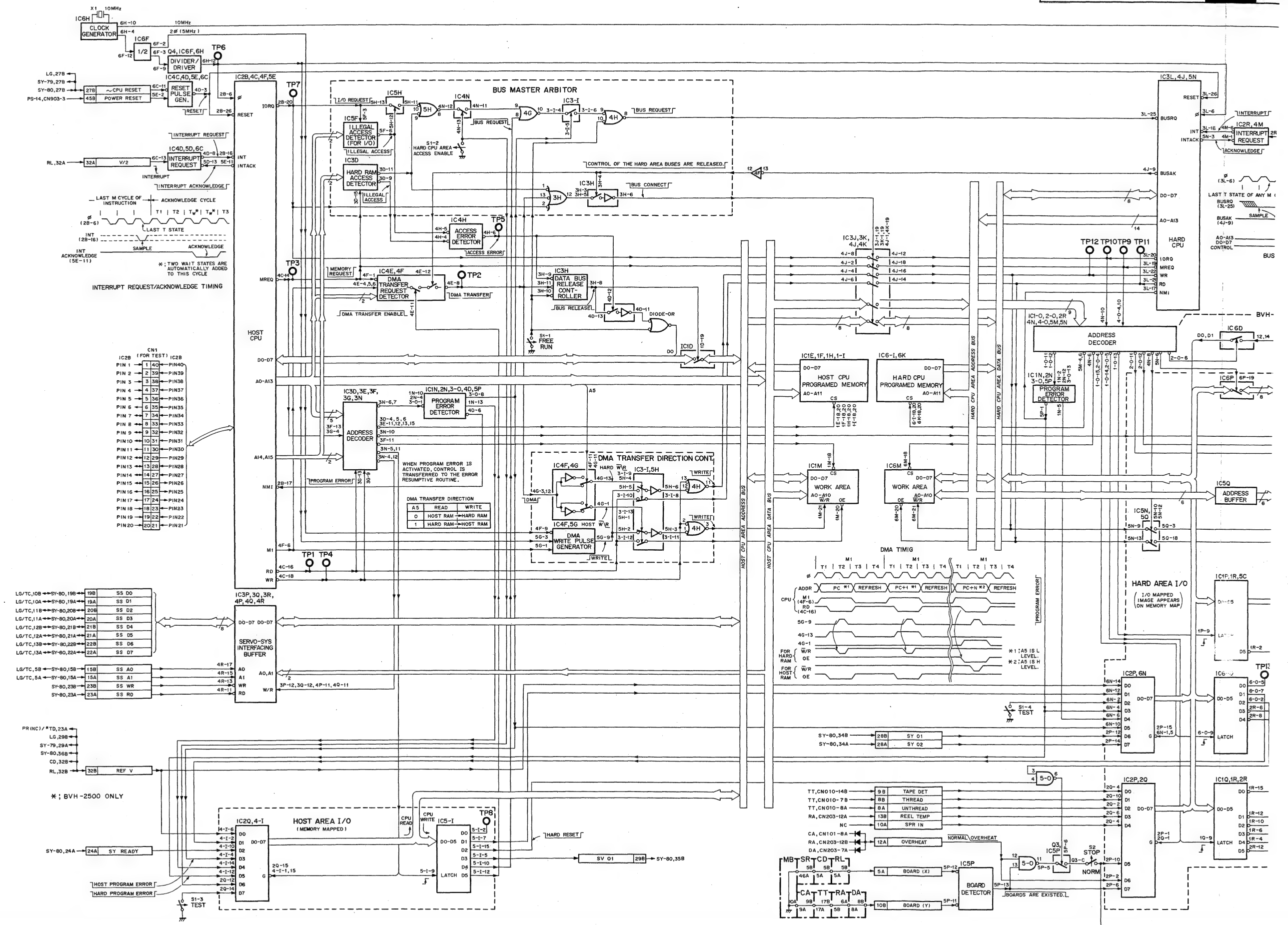
SERVO SYSTEM OVERALL BLOCK DIAGRAM

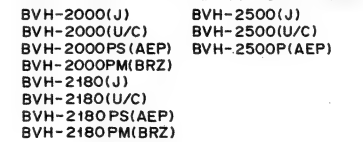




SERVO SYSTEM OVERALL BLOCK DIAGRAM

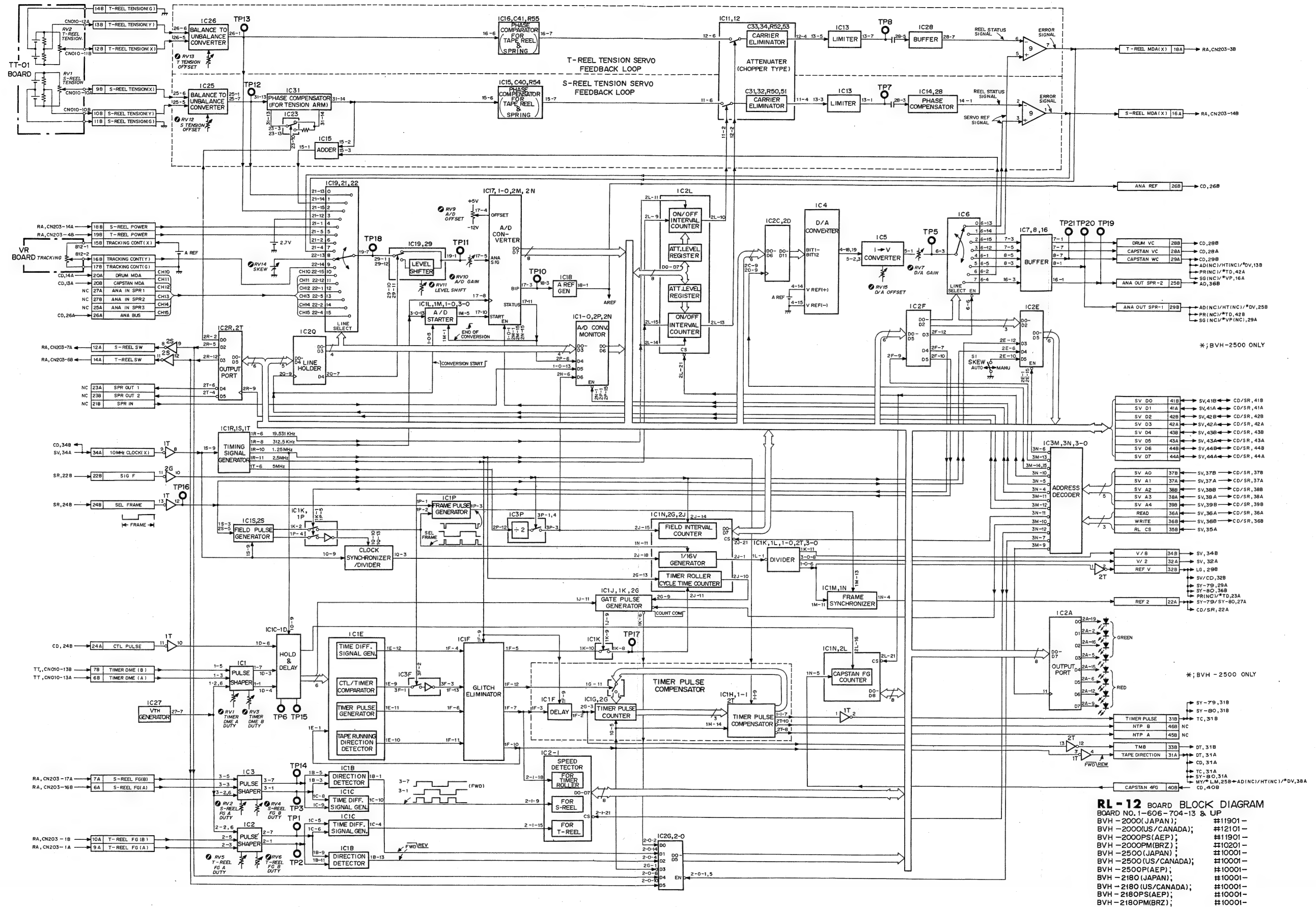
BVH - 2000/2180/2500 (J, U/C)
BVH - 2000PS/2180PS/2500P (AEP)
BVH - 2000PM/2180PM (BRZ)

SV-43 BOARD
 Servo CPU


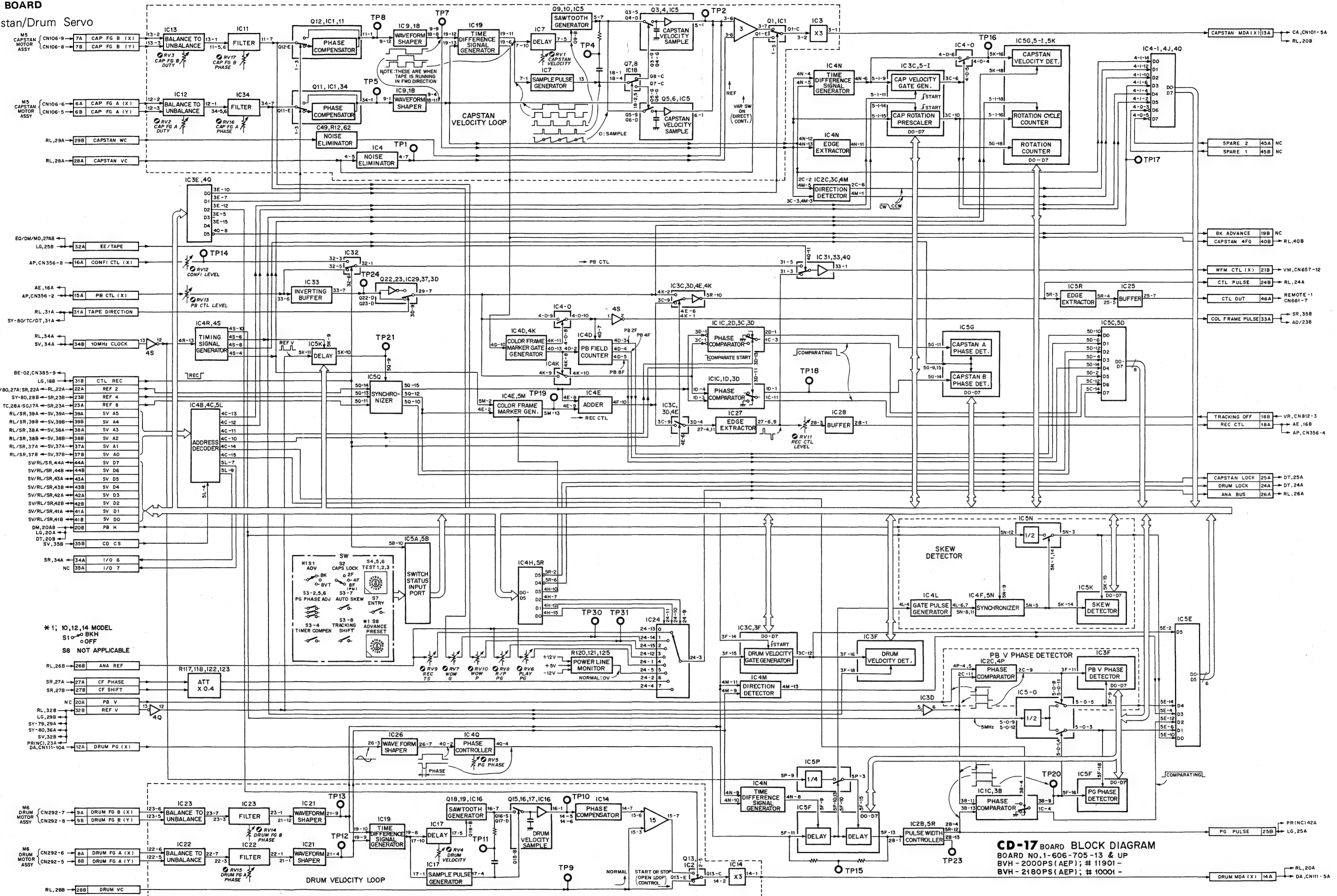


RL-12 BOARD

Reel Servo



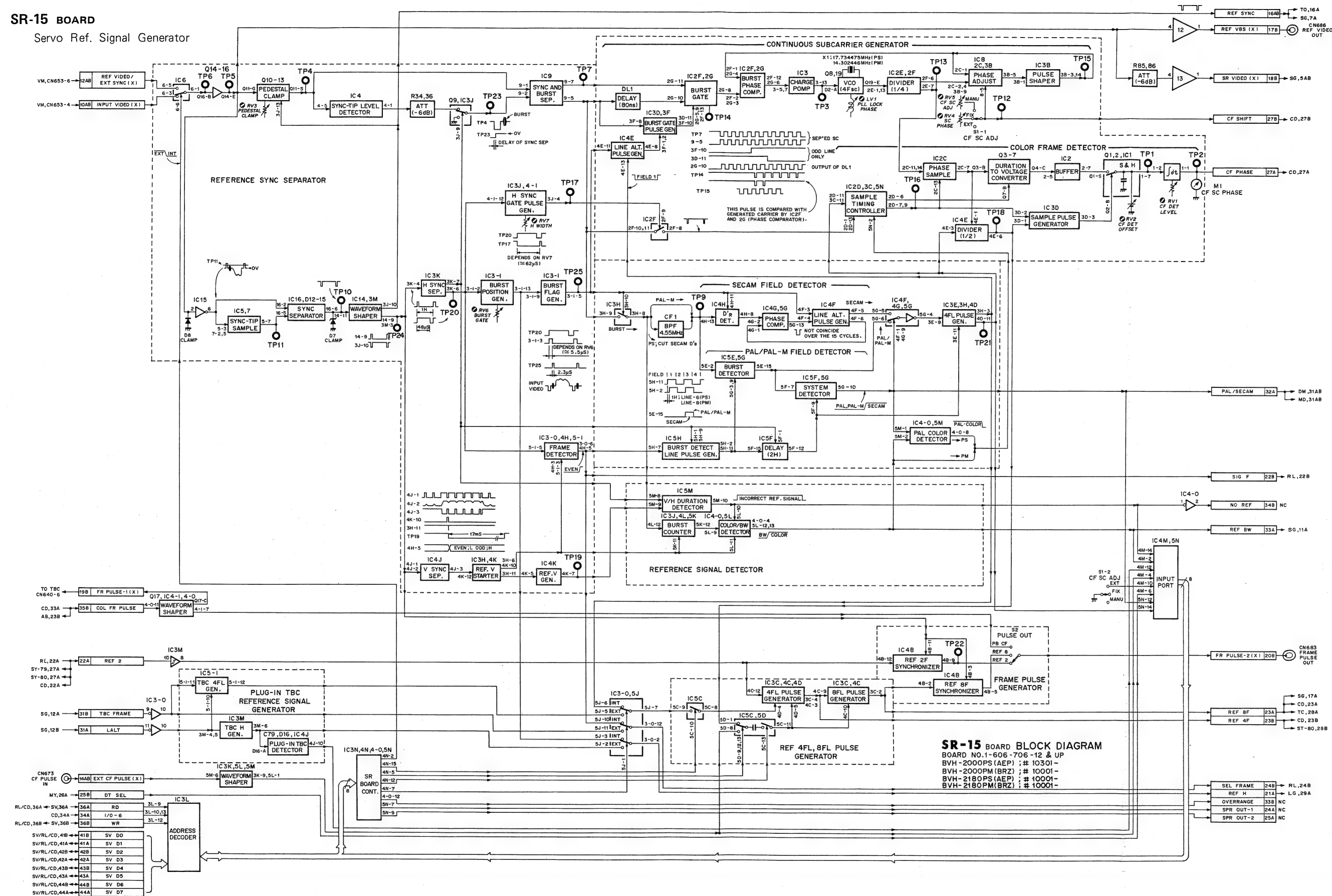
Capstan/Drum Servo



CD-17 BOARD BLOCK DIAGRAM
BOARD NO.1-606-705-13 & UP
BVH-2000PS(AEP); # 11901-
BVH-2180PS(AEP); # 10001-

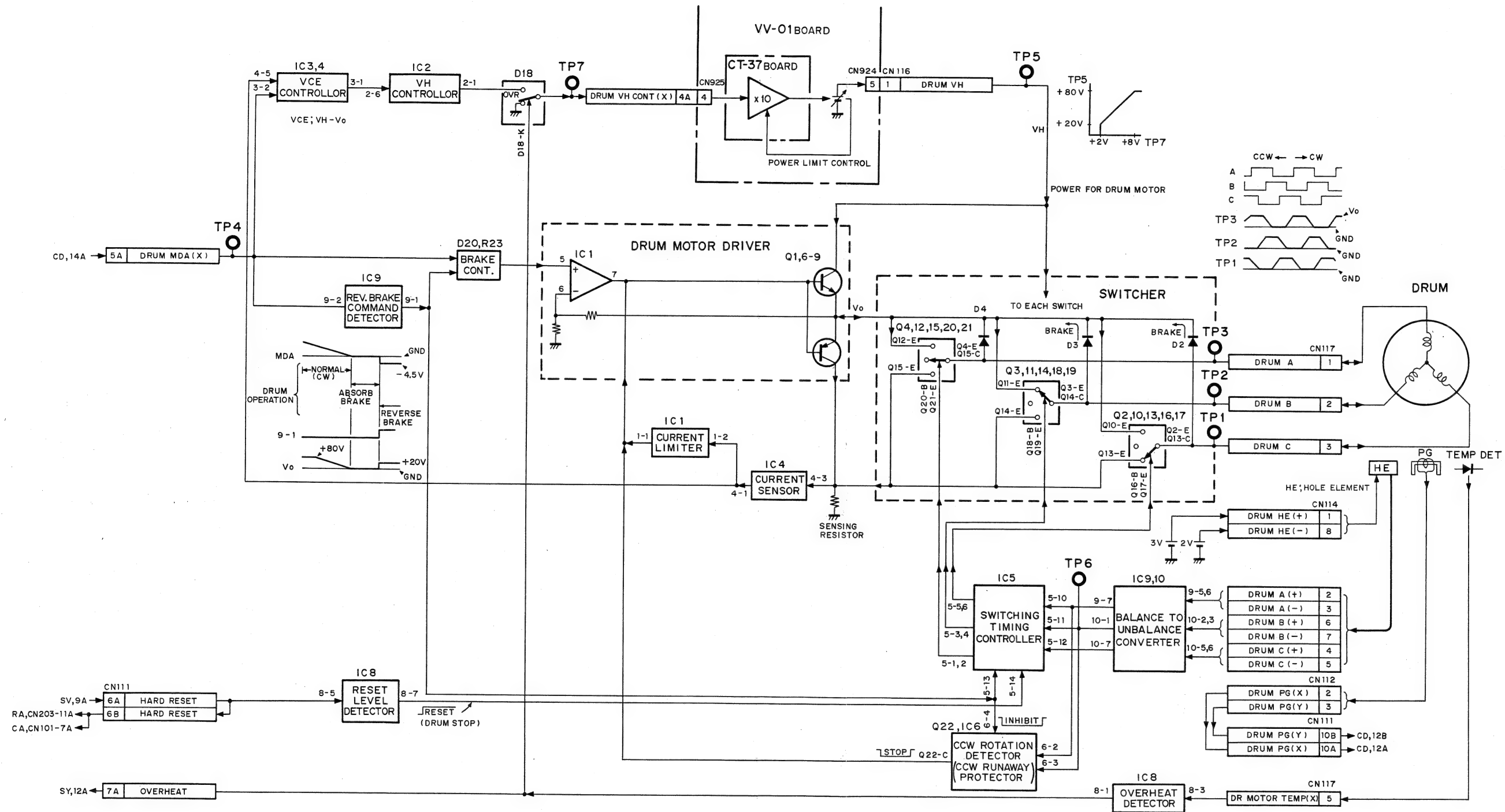
SR-15 BOARD

Servo Ref. Signal Generator



DA-07 BOARD

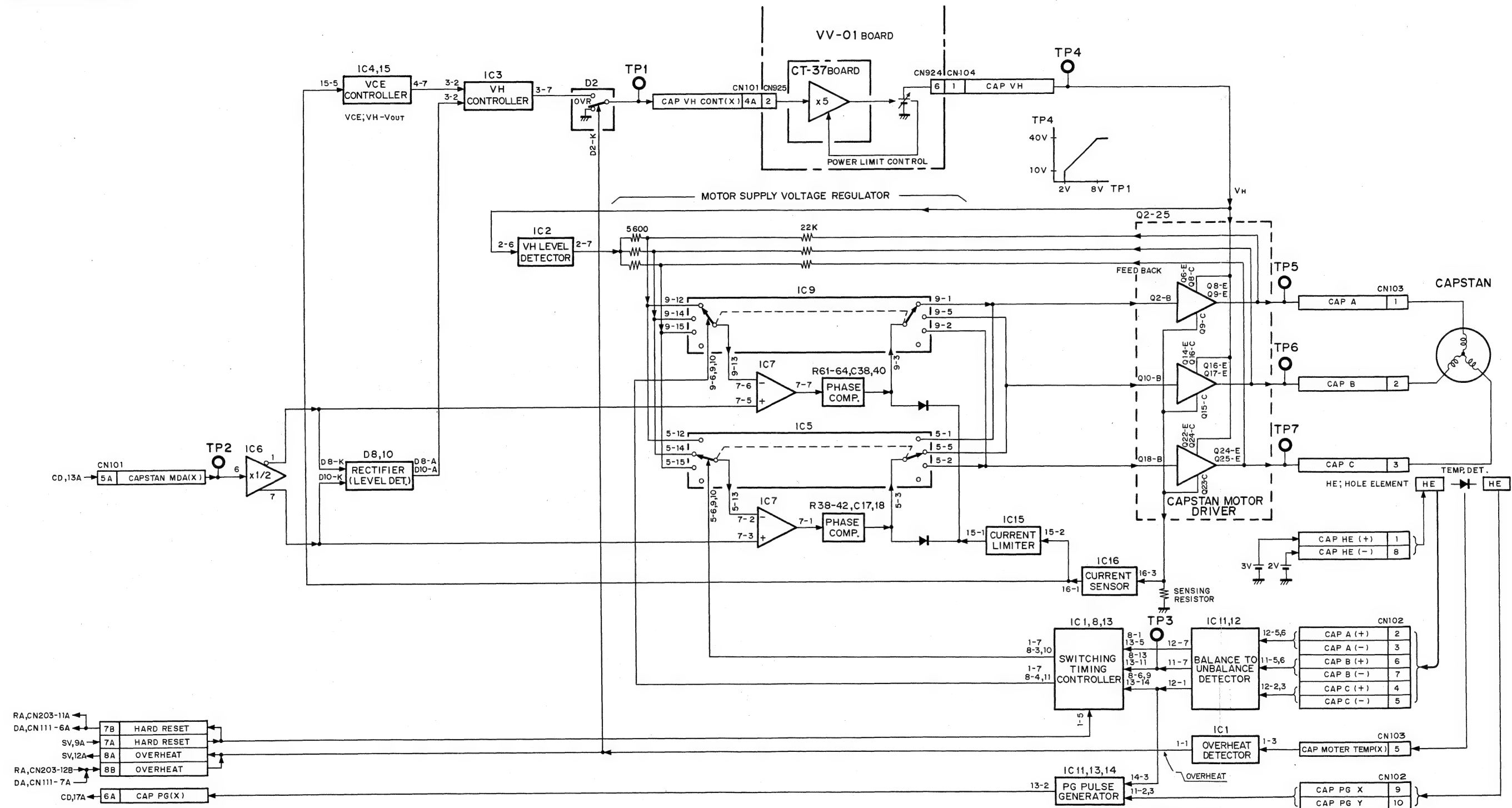
Drum Motor Driver



DA-07 BOARD BLOCK DIAGRAM
 BVH-2000(JAPAN) BVH-2180(JAPAN)
 BVH-2000(US/CANADA) BVH-2180(US/CANADA)
 BVH-2000PS(AEP) BVH-2180PS(AEP)
 BVH-2000PM(BRZ) BVH-2180PM(BRZ)
 BVH-2500(JAPAN)
 BVH-2500(US/CANADA)
 BVH-2500P(AEP)

CA-09 BOARD

Capstan Motor Driver



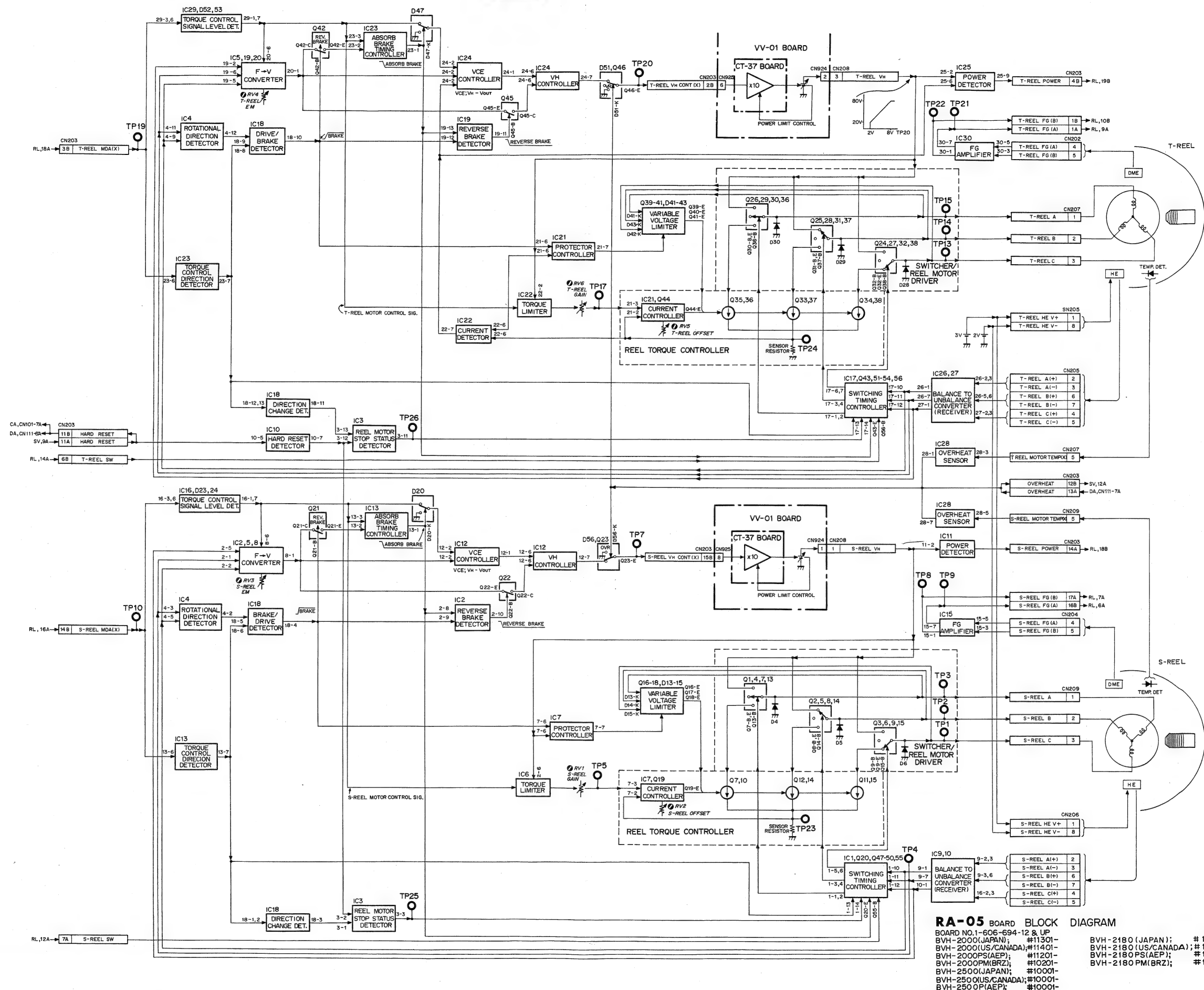
CA-09 BOARD BLOCK DIAGRAM

BVH-2000(JAPAN) BVH-2180(JAPAN)
 BVH-2000(US/CANADA) BVH-2180(US/CANADA)
 BVH-2000PS(AEP) BVH-2180PS(AEP)
 BVH-2000PM(BRZ) BVH-2180PM(BRZ)
 BVH-2500(JAPAN)
 BVH-2500(US/CANADA)
 BVH-2500P(AEP)

RA-05 BOARD
Reel Motor Driver

BLOCK DIAGRAM RA-05

RA-05 BLOCK DIAGRAM

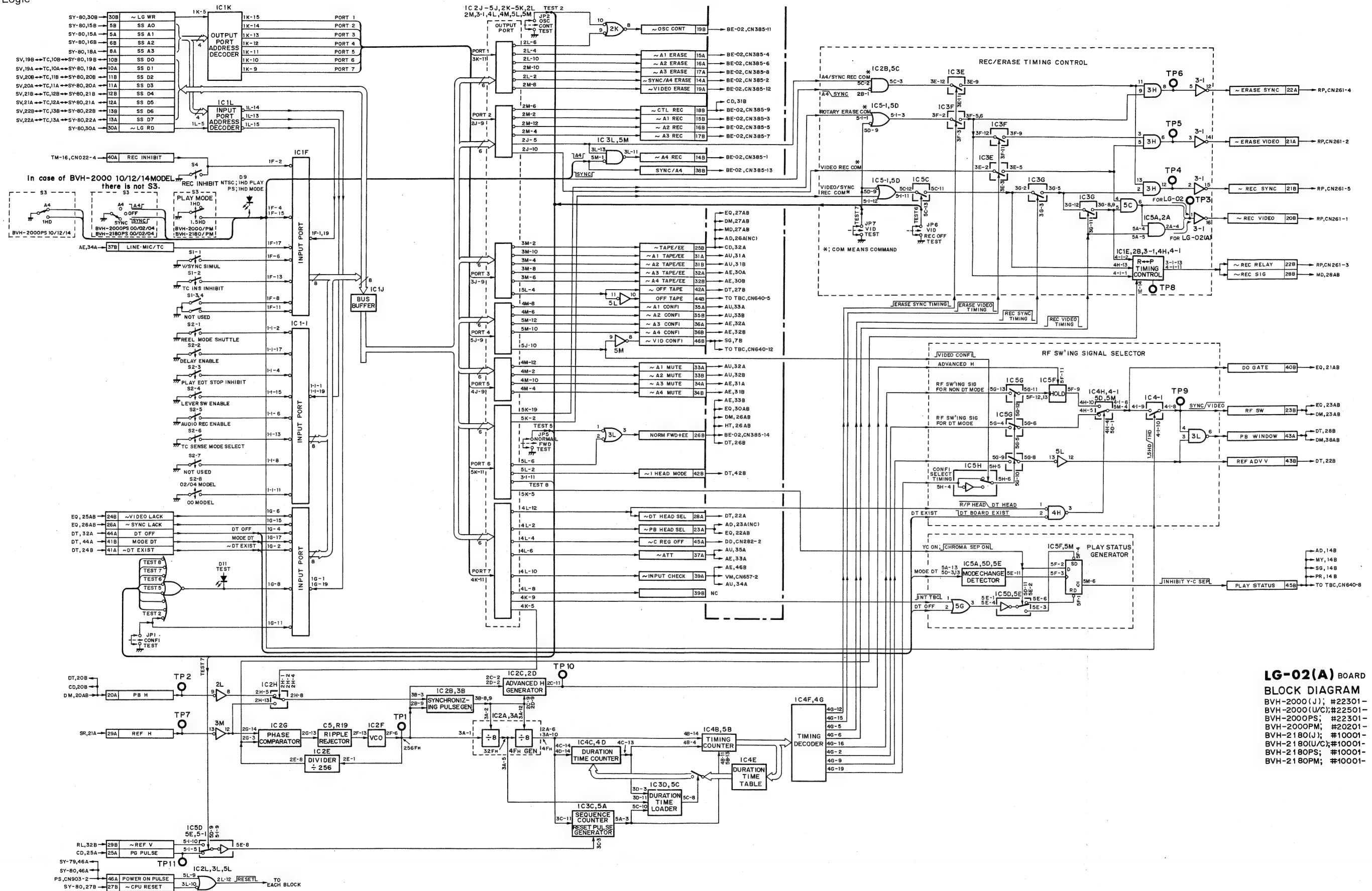


RA-05 BOARD BLOCK DIAGRAM

BOARD NO.1-606-694-12 & UP
BVH-2000(JAPAN); #11301-
BVH-2000(US/CANADA); #11401-
BVH-2000PS(AEP); #11201-
BVH-2000PM(BRZ); #10201-
BVH-2500(JAPAN); #10001-
BVH-2500(US/CANADA); #10001-
BVH-2500PS(AEP); #10001-
BVH-2180(JAPAN); #10001-
BVH-2180(US/CANADA); #10001-
BVH-2180PS(AEP); #10001-
BVH-2180PM(BRZ); #10001-

LG-02(A) BOARD

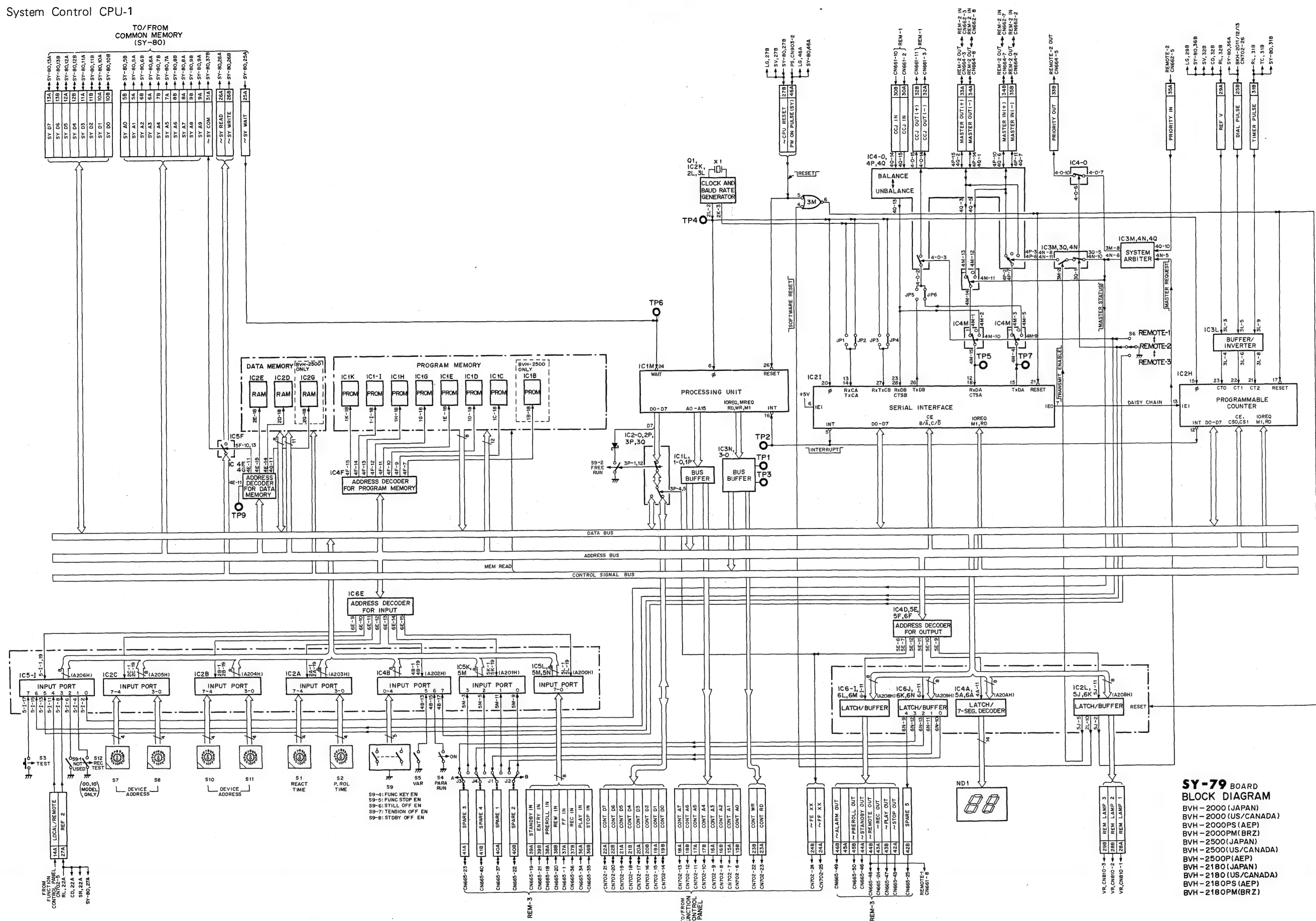
Logic



LG-02(A) BOARD BLOCK DIAGRAM

BVH-2000 (J); #22301-
 BVH-2000 (U/C); #22501-
 BVH-2000PS; #22301-
 BVH-2000PM; #20201-
 BVH-2180 (J); #10001-
 BVH-2180 (U/C); #10001-
 BVH-2180PS; #10001-
 BVH-2180PM; #10001-

System Control CPU-1

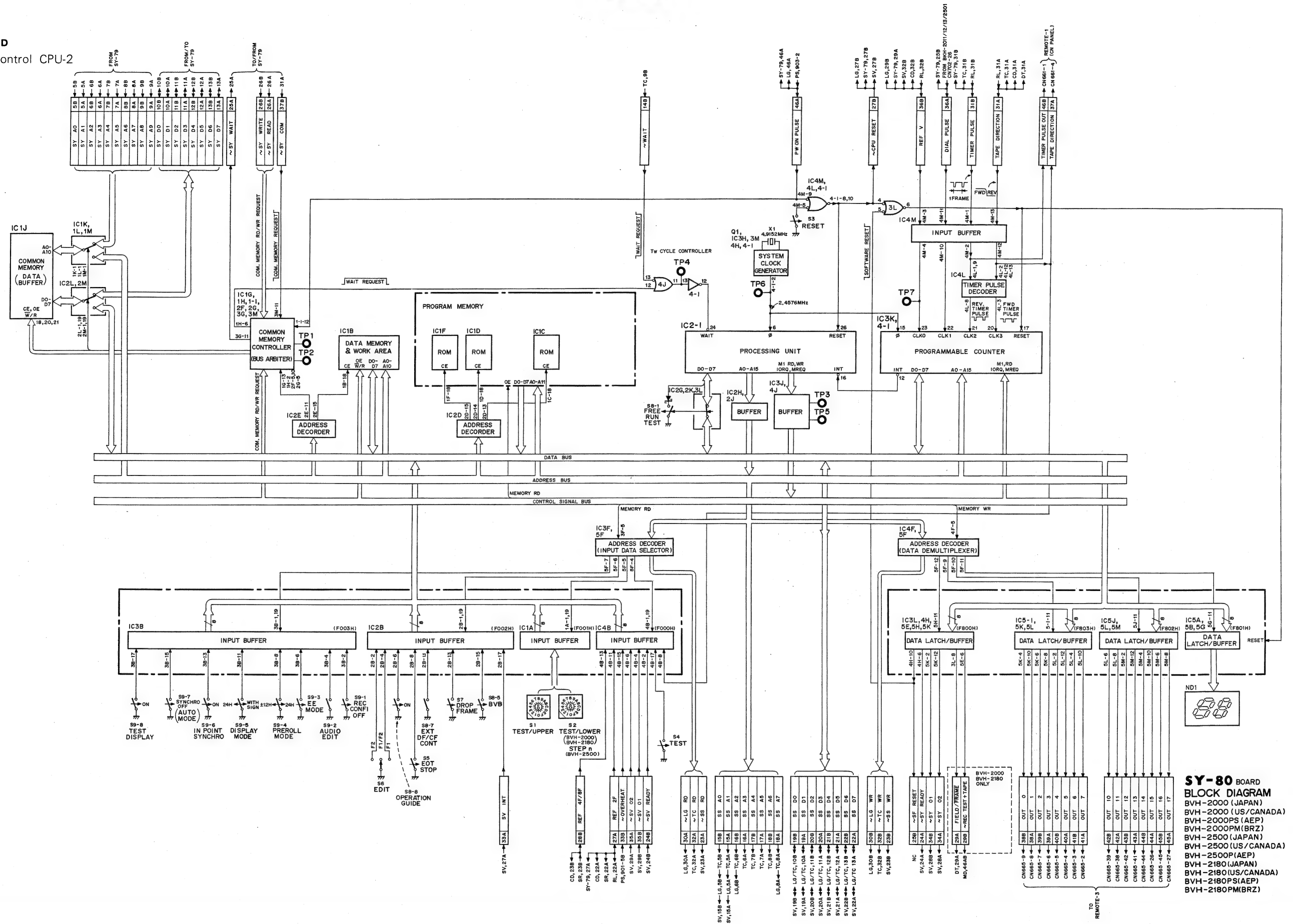


SY-79 BOARD
BLOCK DIAGRAM

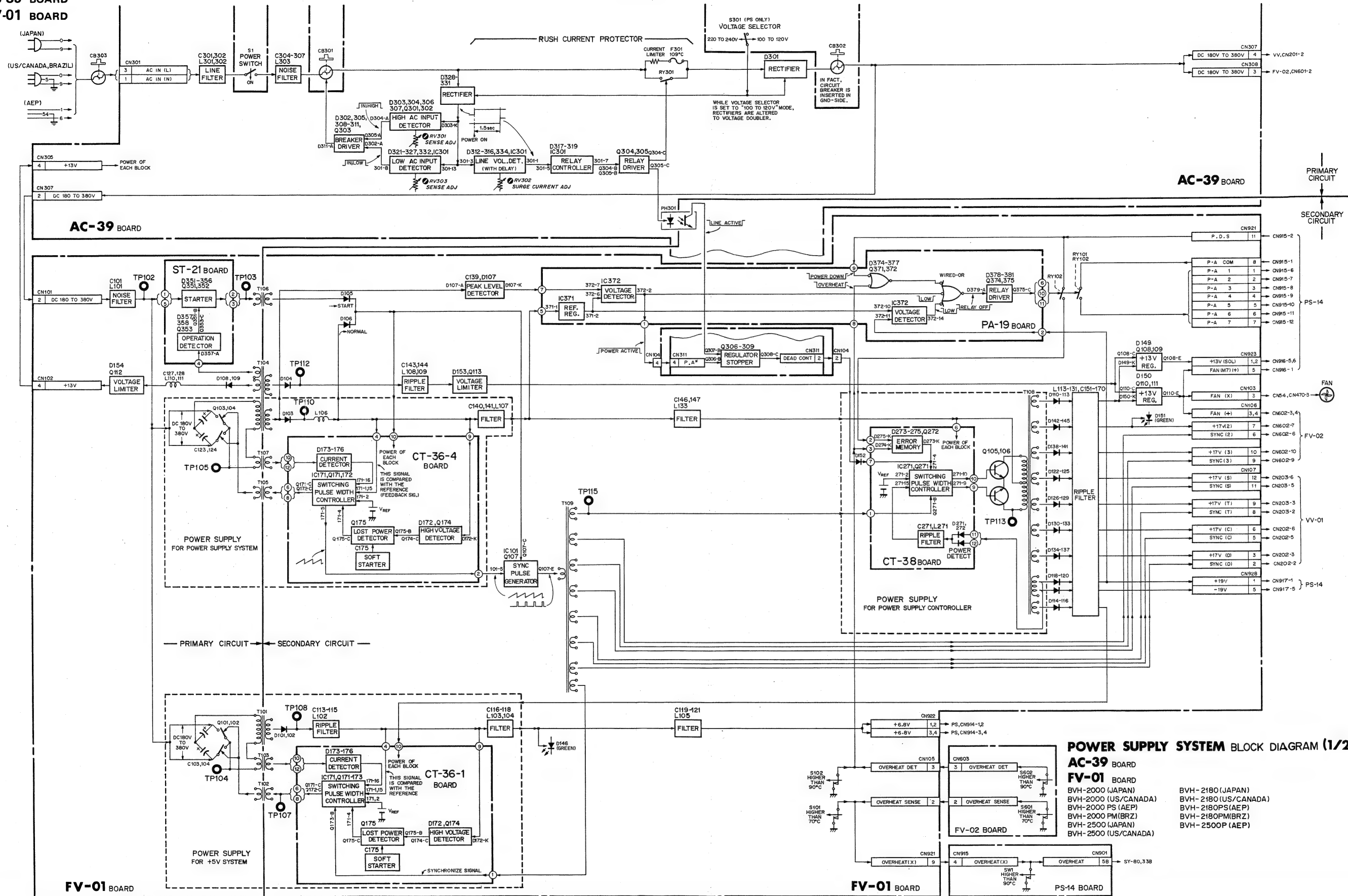
BVH - 2000 (JAPAN)
BVH - 2000 (US/CANADA)
BVH - 2000PS (AEP)
BVH - 2000PM (BRZ)
BVH - 2500 (JAPAN)
BVH - 2500 (US/CANADA)
BVH - 2500P (AEP)
BVH - 2180 (JAPAN)
BVH - 2180 (US/CANADA)
BVH - 2180PS (AEP)
BVH - 2180PM (BRZ)

SY-80 BOARD

System Control CPU-2



POWER SUPPLY SYSTEM (1/2)

AC-39 BOARD
FV-01 BOARD

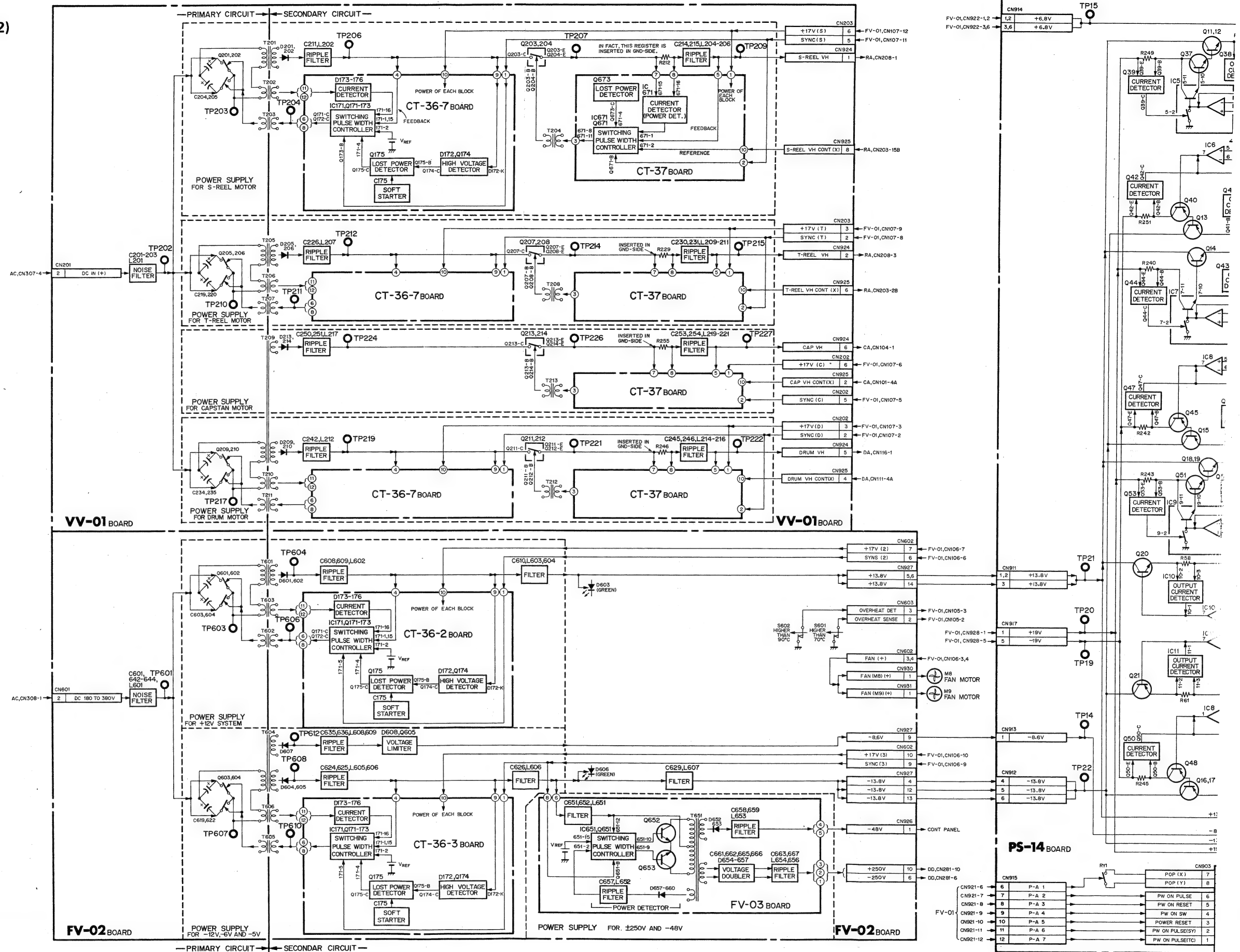
POWER SUPPLY SYSTEM BLOCK DIAGRAM (1/2)

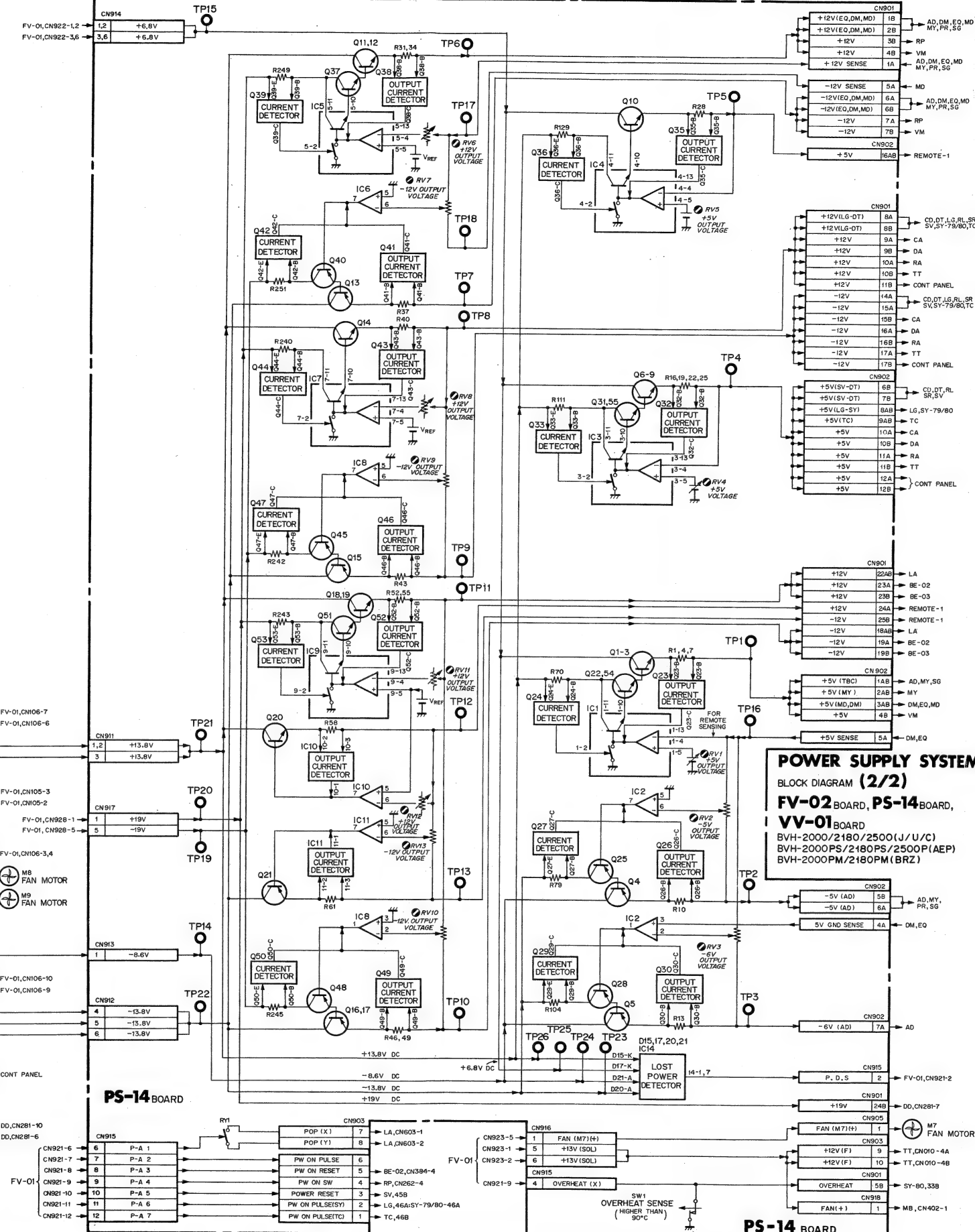
AC-39 BOARD

FV-01 BOARD

BVH-2000 (JAPAN)
BVH-2000 (US/CANADA)
BVH-2000 PS (AEP)
BVH-2000 PM (BRZ)
BVH-2500 (JAPAN)
BVH-2500 (US/CANADA)BVH-2180 (JAPAN)
BVH-2180 (US/CANADA)
BVH-2180PS (AEP)
BVH-2180PM (BRZ)
BVH-2500P (AEP)

PS-14 BOARD
VV-01 BOARD
FV-02 BOARD

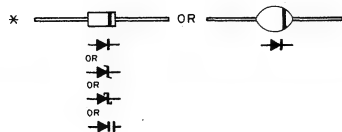




SECTION B

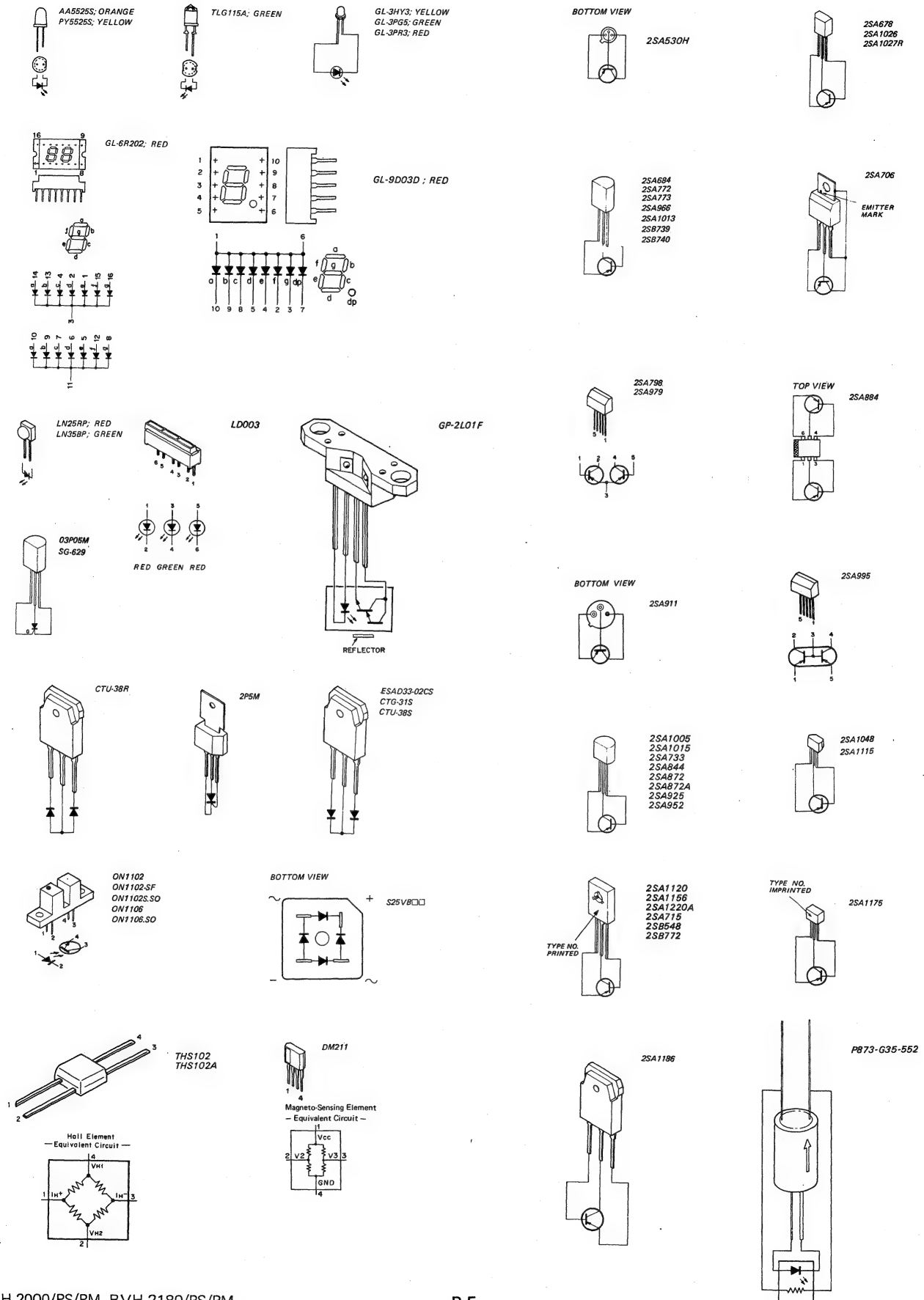
SEMICONDUCTOR PIN ASSIGNMENTS

TYPE	PAGE	TYPE	PAGE	TYPE	PAGE	TYPE	PAGE
03P05M.....	B-5	2SA1175.....	B-5	2SC2603.....	B-6	CX7907A.....	B-12
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10E-2.....	*	2SA1220A.....	B-5	2SC2690A.....	B-6	CX7912A.....	B-14
1N4148H.....	*	2SB548.....	B-5	2SC2724.....	B-6	CX7913.....	B-16
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1S1587.....	*	2SB734.....	B-6	2SC2773.....	B-6	CX20016A-2.....	B-9
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1S2473.....	*	2SB772.....	B-5	2SC2878.....	B-6		
1S2687.....	*	2SB825.....	B-6	2SC2901.....	B-6	DAC-1C8BC.....	B-20
						DM211.....	B-5
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1SS106.....	*	2SC641K.....	B-6	2SC3559.....	B-6	EQA01-08R.....	*
1SS119.....	*	2SC689H.....	B-6			EQA02-05.....	*
1SS120.....	*	2SC710.....	B-6	2SD313HP.....	B-6	EQA02-06.....	*
				2SD414.....	B-6	EQA02-07.....	*
1SS133.....	*	2SC945.....	B-6	2SD773.....	B-6	EQA02-08.....	*
1SS148.....	*	2SC1124.....	B-6	2SD774.....	B-6	EQA02-10.....	*
1SZ52.....	*	2SC1126.....	B-6	2SD788.....	B-6	EQB01-13.....	*
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		2SC1173.....	B-6	2SD789.....	B-6	ERB12-01RK.....	*
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2SA772.....	B-5	2SC1636.....	B-6	2SK523.....	B-6	GL6R202.....	B-5
2SA773.....	B-5	2SC1733.....	B-6			GL9D03D.....	B-5
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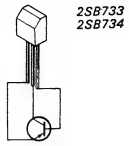


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HM6168HP.....	B-23	MC14071BCP.....	B-38	SN74LS03N.....	B-25	SN74LS244N.....	B-32
		MC14073BCP.....	B-38	SN7404N.....	B-25	SN74LS245N.....	B-33
JC501.....	B-6	MC14081BCP.....	B-38	SN74LS04N.....	B-25	SN74LS257N.....	B-33
LD003.....	B-5	MC14174BCP.....	B-40	SN74S04N.....	B-25	SN74265N.....	B-33
		MC14175BCP.....	B-40	SN74LS05N.....	B-25	SN74LS265N.....	B-33
LH0080.....	B-21	MC14495P.....	B-38	SN7406N.....	B-26	SN74LS273N.....	B-33
LH0080A.....	B-21	MC14503BCP.....	B-39	SN74LS08N.....	B-26	SN74LS280N.....	B-33
LH0082.....	B-21	MC14507BCP.....	B-37	SN74LS10N.....	B-26	SN74LS365AN.....	B-33
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LH0084.....	B-22	MC14512BCP.....	B-39	SN74S10N.....	B-26	SN74LS367AN.....	B-34
LH0084A.....	B-22	MC14520BCP.....	B-39	SN74LS11N.....	B-26	SN74LS368AN.....	B-34
		MC14526BCP.....	B-39	SN74S11N.....	B-26	SN74LS373N.....	B-34
LM358P.....	B-43	MC14528BCP.....	B-39	SN74LS12N.....	B-26	SN74LS374N.....	B-34
LN25RP.....	B-5	MC14538BCP.....	B-39	SN74LS14N.....	B-26	SN74LS375N.....	B-34
LN35BP.....	B-5						
		MC14555BCP.....	B-40	SN74LS20N.....	B-26	SN74LS390N.....	B-34
M54516P.....	B-22	MC14557BCP.....	B-40	SN74LS27N.....	B-26	SN74LS393N.....	B-35
M54517P.....	B-22	MC14584BCP.....	B-40	SN74LS30N.....	B-26	SN74LS624N.....	B-35
		MC1496P.....	B-43	SN74LS32N.....	B-27	SN74LS669N.....	B-35
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MB7051.....	B-45	MC1596G.....	B-43				
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MB7053.....	B-46	MC74HC107P.....	B-41	SN74LS85N.....	B-27	SN75207BN.....	B-35
MB7054.....	B-47	MC74HC132P.....	B-41	SN74LS86N.....	B-27	SN75452BP.....	B-35
MB8168.....	B-23			SN74LS107AN.....	B-27		
		MSM4011RS.....	B-36	SN74LS112AN.....	B-27	TA7069P.....	B-41
MB84001B.....	B-36	MSM5128.....	B-20				
MB84011B.....	B-36			SN74120N.....	B-27	TC4001BP.....	B-36
MB84013B.....	B-36	NE527H.....	B-25	SN74123N.....	B-28	TC4008BP.....	B-36
MB84049UB.....	B-37	NE527N.....	B-25	SN74LS123AN.....	B-28	TC4011BP.....	B-36
MB84052B.....	B-38	NJM2903D.....	B-25	SN74LS125AN.....	B-28	TC4013BP.....	B-36
		NJM4558D.....	B-25	SN74LS126AN.....	B-28	TC4015BP.....	B-36
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MB84069UB.....	B-38	NJM4560D.....	B-25	SN74128N.....	B-28	TC4028BP.....	B-36
MB84081B.....	B-38	NJM78L05.....	B-25	SN74LS138N.....	B-28	TC4030BP.....	B-37
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		P873-G35-552....	B-5	SN74LS153N.....	B-29	TC4049BP.....	B-37
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MC1595L.....	B-24			SN74LS161AN.....	B-29	TC4052BP.....	B-38
MC10105L.....	B-24	RD3.9E.....	*	SN74LS162AN.....	B-29	TC4053BP.....	B-38
MC10115L.....	B-24	RD4.7E.....	*	SN74LS163AN.....	B-30	TC4069UBP.....	B-38
MC10116L.....	B-24	RD5.1E.....	*				
		RD5.6E.....	*	SN74LS164N.....	B-30	TC4071BP.....	B-38
MC10117L.....	B-24	RD6.8E.....	*	SN74S169N.....	B-30	TC4073BP.....	B-38
MC10124L.....	B-24			SN74LS174N.....	B-30	TC4081BP.....	B-38
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		RD11E.....	*	SN74LS191N.....	B-31	TC4528BP.....	B-39
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MC14008BCP.....	B-36			SN74LS195AN.....	B-32	TC4555BP.....	B-40
MC14011BCP.....	B-36	RD15E.....	*	SN74LS197N.....	B-32	TC40174BP.....	B-40
MC14013BCP.....	B-36	RD18E.....	*	SN74LS221N.....	B-32	TC40175BP.....	B-40
MC14015BCP.....	B-36	RD22E.....	*	SN74LS240N.....	B-32	TC40H074P.....	B-40
		RD30E.....	*				
MC14043BCP.....	B-37	RD39E.....	*				
MC14046BCP.....	B-37					TC40H368P.....	B-40
MC14049UBCP.....	B-37	RD100E.....	*			TC40H390P.....	B-41
MC14051BCP.....	B-37					TC504013BP.....	B-41
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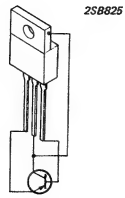
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TL082CP.....	B-41	UPD4069UBC.....	B-38
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UPD780C.....	B-21		



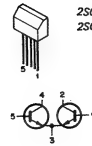
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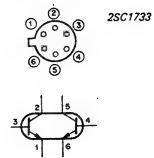


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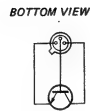
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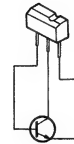


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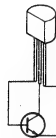
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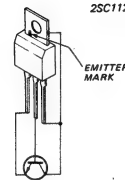
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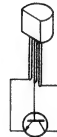


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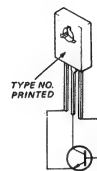
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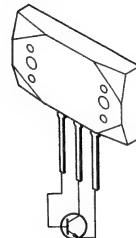


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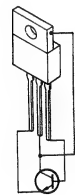


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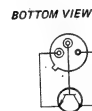
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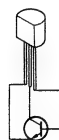
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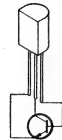
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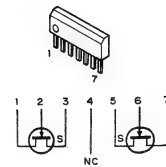
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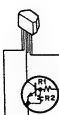
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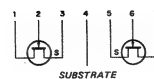
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DTC144ES (R1=47K, R2=47K)



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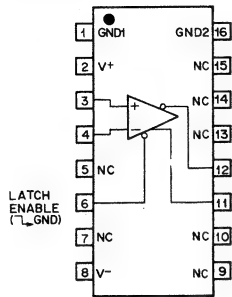


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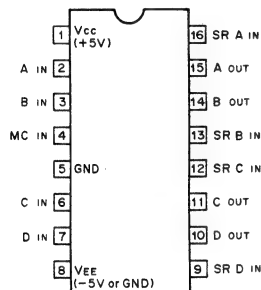


2SK162

AD9685BD (ANALOG DEVICES)
AM685DL (ADVANCED MICRO DEVICES)
VOLTAGE COMPARATOR
(OPEN EMITTER OUTPUTS)
— TOP VIEW —

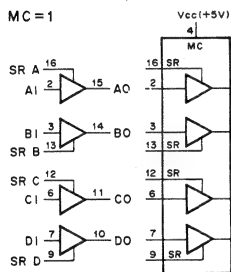


AM26LS30PC (ADVANCED MICRO DEVICE)
LINE DRIVER
— TOP VIEW —



MC: MODE CONTROL
SR: SLEW RATE CONTROL

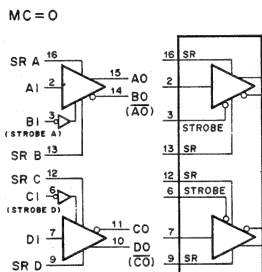
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1	1

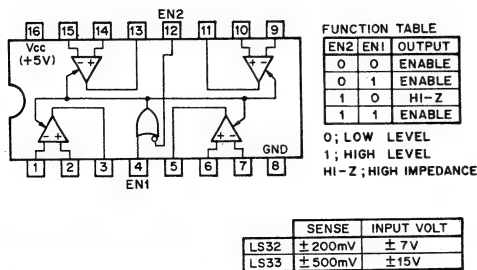
0: LOW LEVEL X: DONT CARE
1: HIGH LEVEL HI-Z: HIGH IMPEDANCE

MC=0



INPUTS			OUTPUTS	
MC	STROBE	A & D	A & D	B & C
0	0	0	0	1
0	0	1	1	0
0	1	X	HI-Z	HI-Z

AM26LS32AC (TI)
AM26LS32PC (ADVANCED MICRO DEVICE)
HIGH SPEED DIFFERENTIAL LINE RECEIVER
— TOP VIEW —

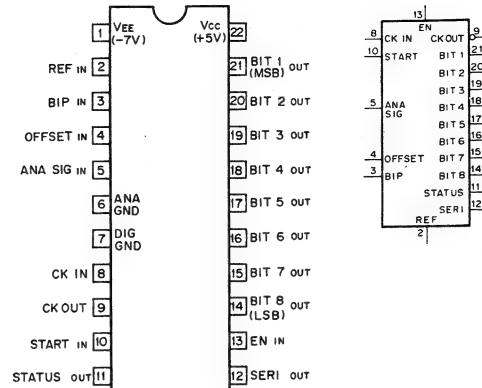


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0	1	ENABLE
1	0	HI-Z
1	1	ENABLE

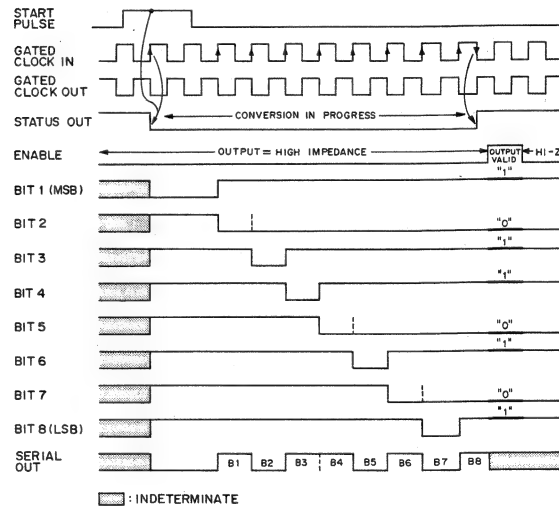
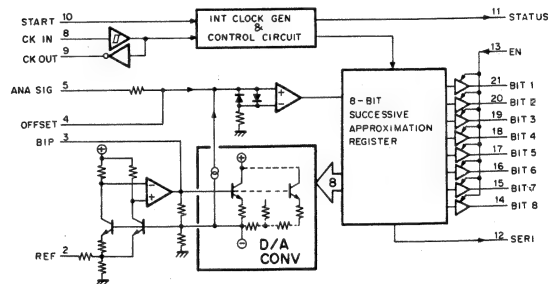
0: LOW LEVEL
1: HIGH LEVEL
HI-Z: HIGH IMPEDANCE

SENSE	INPUT VOLT
LS32	$\pm 200\text{mV}$ $\pm 7\text{V}$
LS33	$\pm 500\text{mV}$ $\pm 15\text{V}$

BA9101 (ROHM)
8-BIT A/D CONVERTER WITH 3-STATE OUTPUT CONTROL
— TOP VIEW —

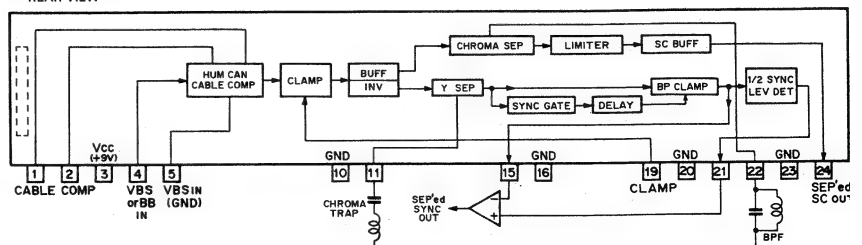


REF: REFERENCE VOLTAGE ADJUST
BIP: BIPOlar OFFSET IN
CK IN: EXTERNAL CLOCK or CK IN
CK OUT: INVERTED CLOCK OUT
START: CONVERSION START PULSE IN
STATUS: STATUS FLAG OUT
SERI: SERIAL OUT
EN: OUTPUT ENABLE

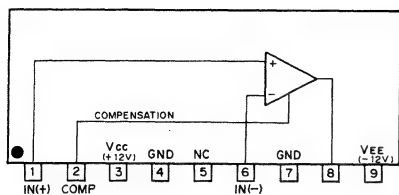


TIMING DIAGRAM (Binary Code 10110101)

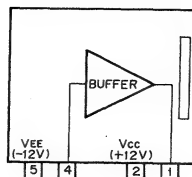
BX1040 (SONY)
SYNC SEPARATOR
— REAR VIEW —



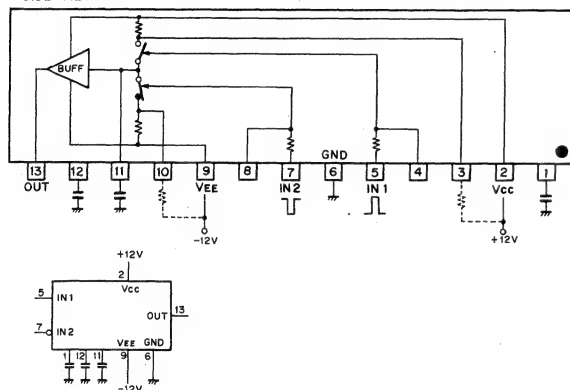
BX365A (SONY)
A7015
VIDEO AMPLIFIER
— SIDE VIEW —



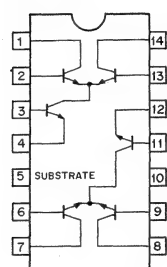
BX3931 (SONY)
BX3931A (SONY)
HYBRID VIDEO WIDEBAND
BUFFER AMPLIFIER
—IMPRINTED SIDE—



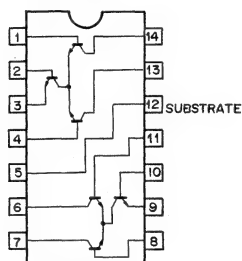
BX381 (SONY)
PHASE COMPARATOR
—SIDE VIEW—



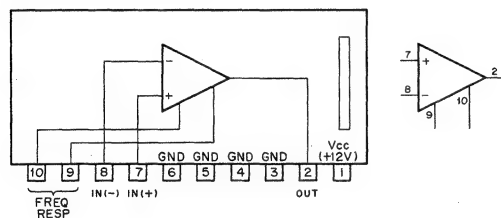
CA3054 (RCA)
DIFFERENTIAL AMPLIFIER
—TOP VIEW—



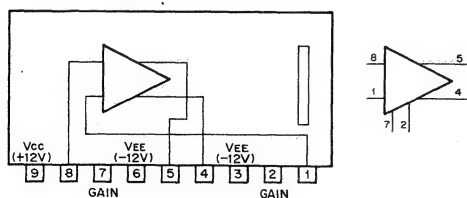
CA3102E(RCA)
HIGH FREQ. DIFFERENTIAL AMPLIFIER
—TOP VIEW—



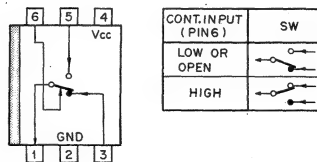
BX1156 (SONY)
BX3929 (SONY)
HYBRID VIDEO RF PREAMPLIFIER
—IMPRINTED SIDE—



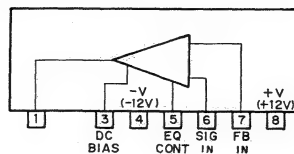
BX3930 (SONY)
HYBRID VIDEO WIDEBAND DIFFERENTIAL AMPLIFIER
—IMPRINTED SIDE—



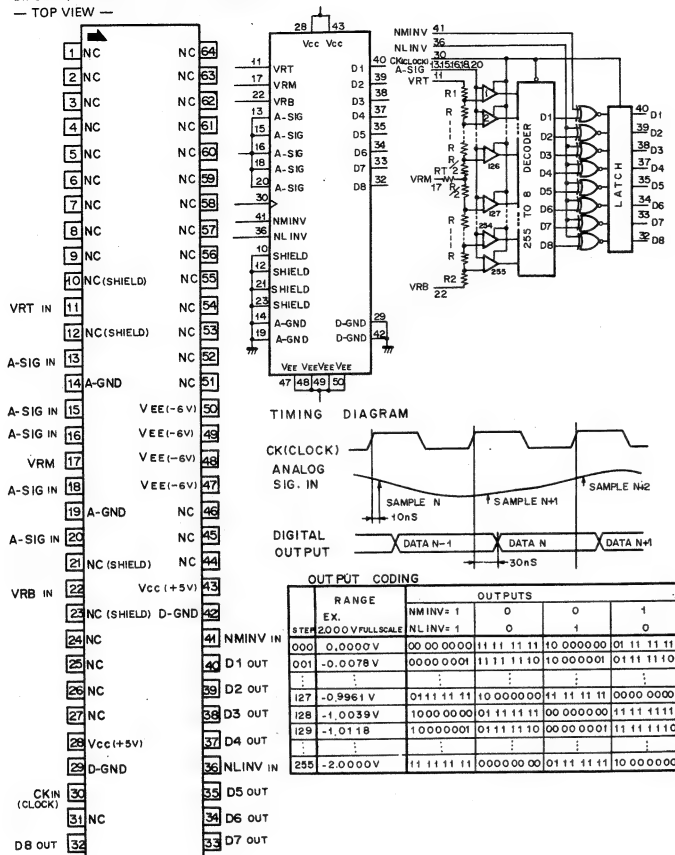
CX130 (SONY)
CX20060 (SONY)
ANALOG SWITCH
— TOP VIEW —



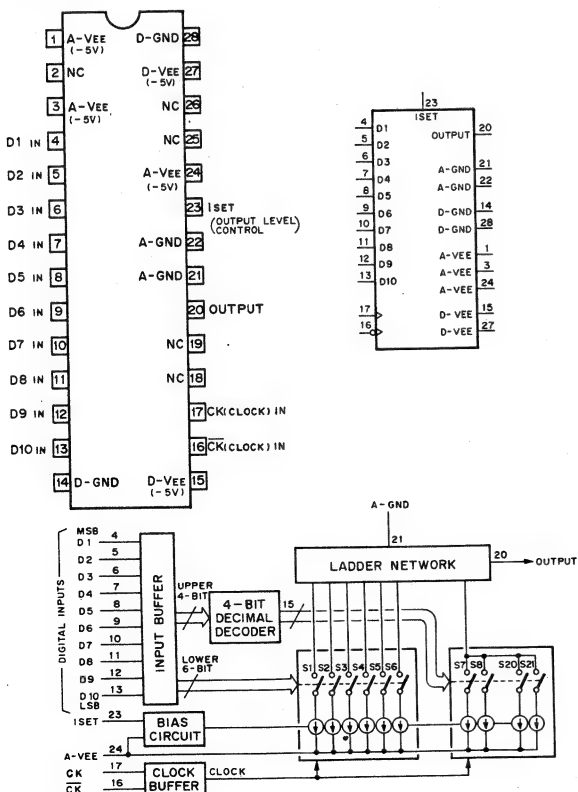
CX550 (SONY)
HA12017 (HITACHI)
AUDIO PREAMPLIFIER
— SIDE VIEW —



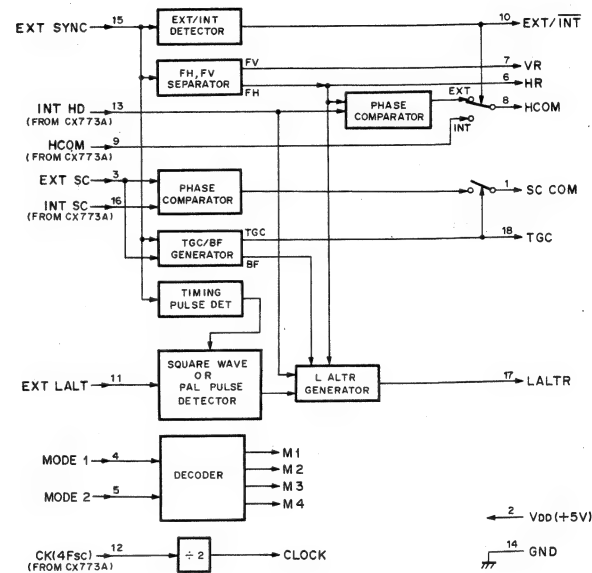
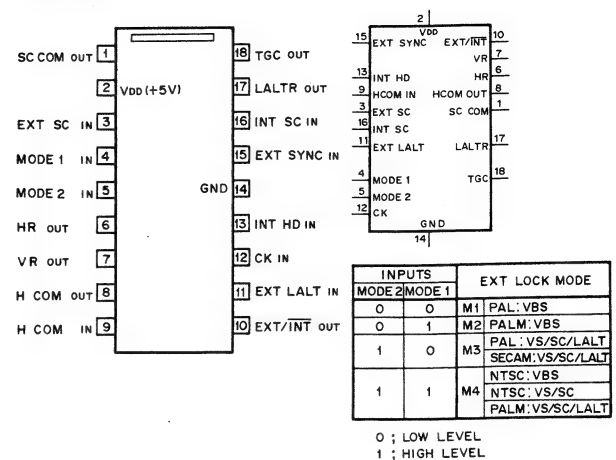
CX20016 (SONY)
CX20016A (SONY)
CX20016A-2 (SONY)
TDC1007J (TRW)
BIPOLAR/TTL 8-BIT VIDEO A/D CONVERTER
— TOP VIEW —



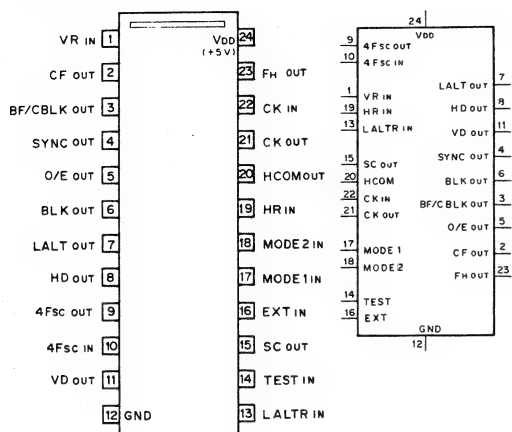
CX20051 (SONY)
CX20051A (SONY)
10-BIT D/A CONVERTER (ECL INPUT)
— TOP VIEW —



CX7903 (SONY)
C-MOS GENLOCK DRIVER FOR CX773A
— TOP VIEW —



CX773A (SONY)
CX773A-1 (SONY)
CX773B (SONY)
C-MOS SYNC GENERATOR (NTSC, PAL-M, PAL, SECAM)
— TOP VIEW —



O/E : ODD/EVEN FIELD
CF : COLOR FRAME PULSE
HCOM : H COMPARATOR

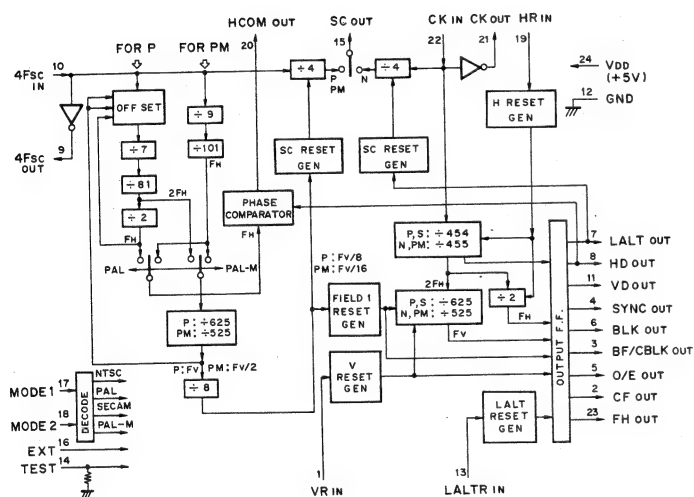
SYSTEM	4Fsc	CLOCK
NTSC	910 Fh	910 Fh
PAL	1135 Fh+2Fv	908 Fh
PALM	909 Fh	910 Fh
SECAM	—————	908 Fh

INPUTS		SYSTEM
MODE 1	MODE 2	
0	0	NTSC
0	1	SECAM
1	0	PALM

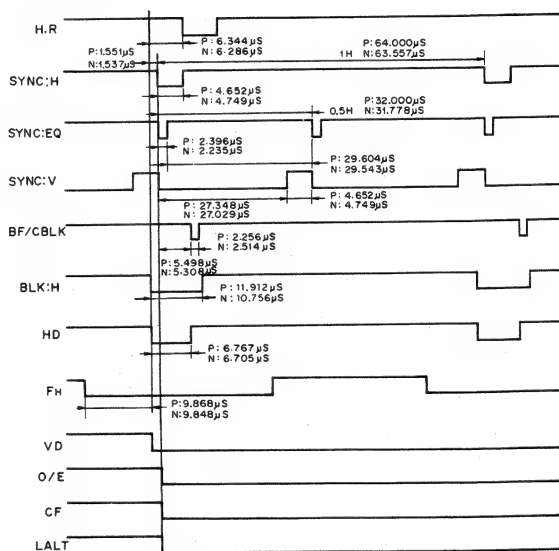
INPUTS		FUNCTION
EXT	TEST	
0	0	INTERNAL
0	1	INVALID
1	0	EXT

0 ; LOW LEVEL (GND)
1 ; HIGH LEVEL (VDD)

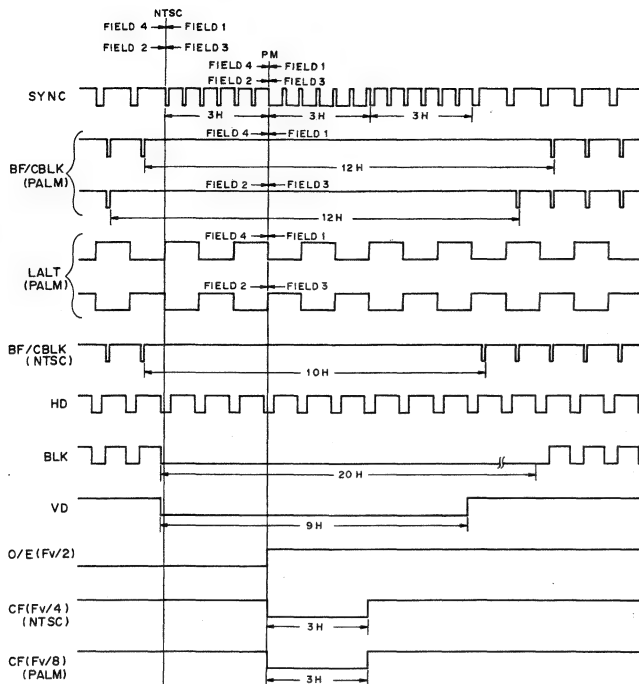
TEST "O": OPEN
(INTERNALLY)
(PULLED DOWN)



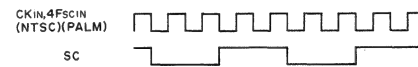
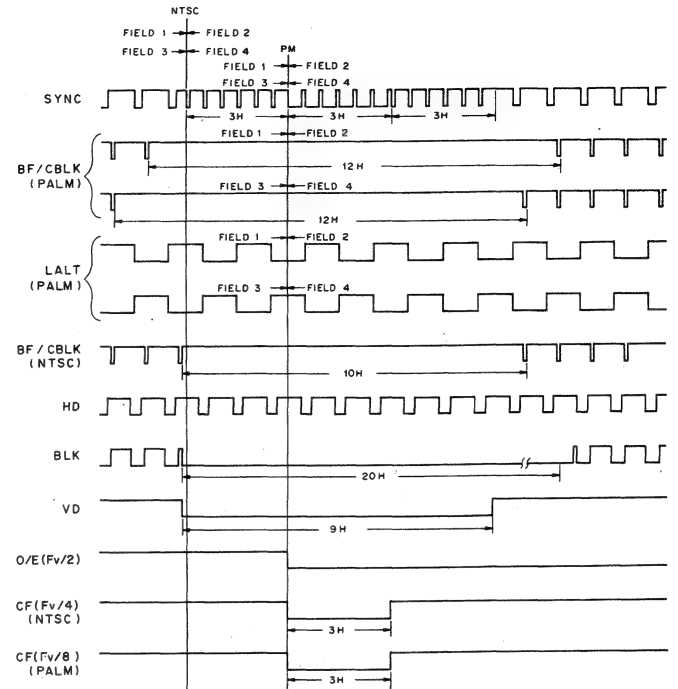
P: PAL, SECAM
N: NTSC, PAL



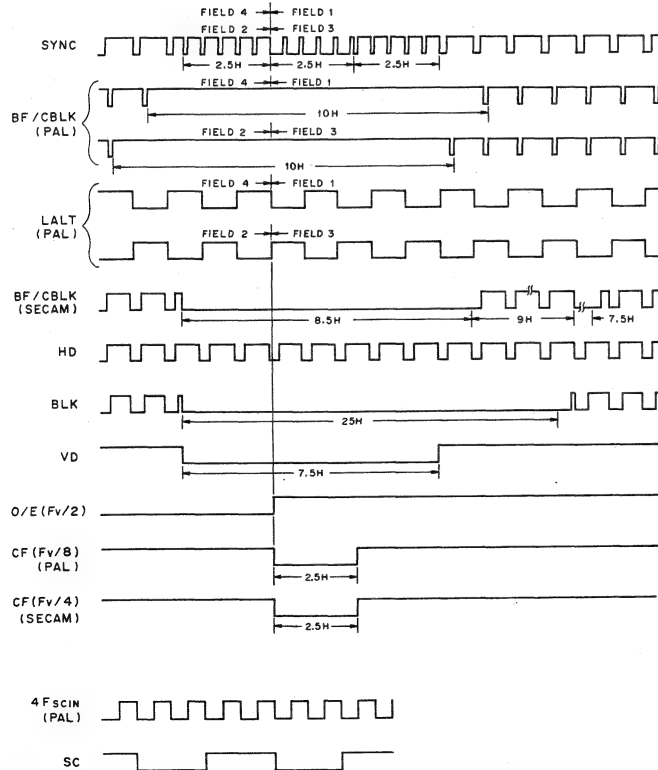
NTSC, PAL-M (FIELD 1,3)



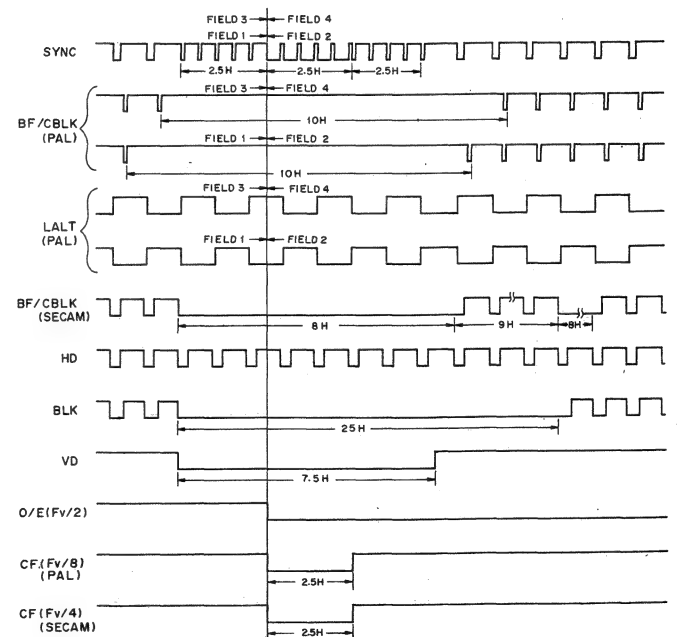
NTSC, PAL-M (FIELD 2,4)



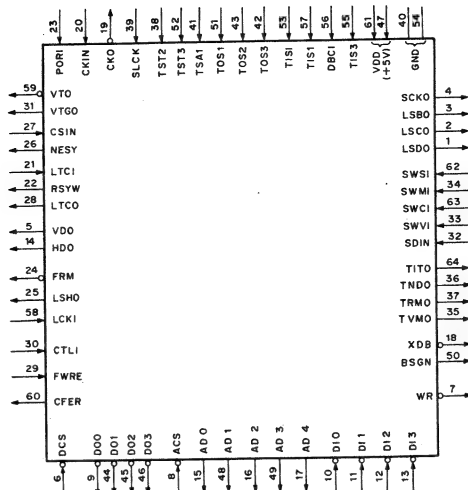
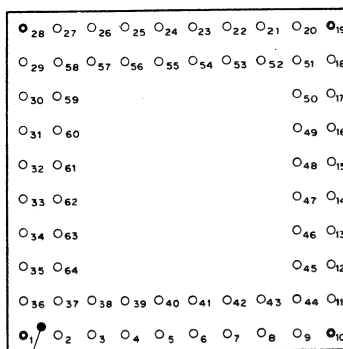
PAL, SECAM (FIELD 1,3)



PAL, SECAM (FIELD 4,2)

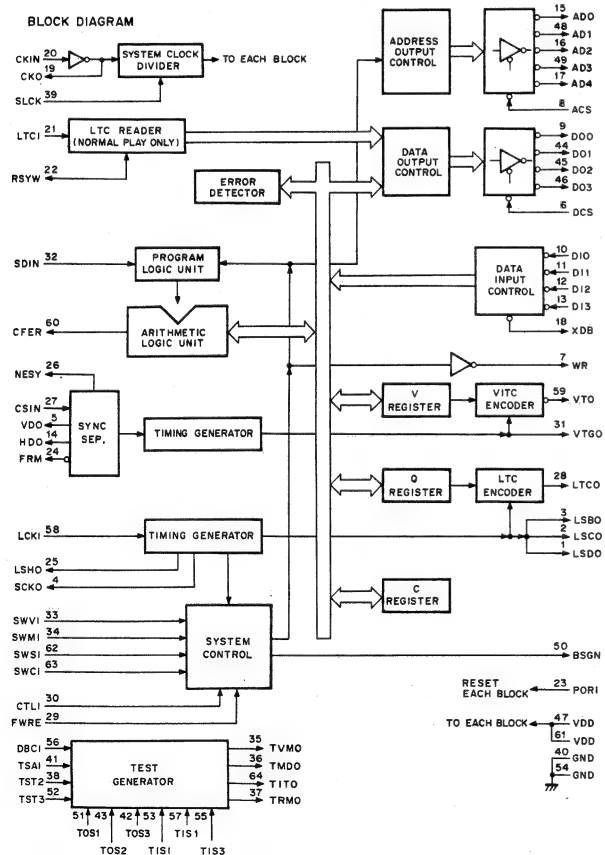


CX7907 (SONY)
CX7907A (SONY)
C-MOS TIME CODE GENERATOR
— TOP VIEW —



PIN ASSIGNMENT

Pin No.	IN	OUT	SYMBOL	Pin No.	IN	OUT	SYMBOL	Pin No.	IN	OUT	SYMBOL	Pin No.	IN	OUT	SYMBOL
1			LSDO	17			AD4	33			SWVI	49			AD3
2			LSCO	18			XDB	34			SWMI	50			BSGN
3			LSBO	19			CKO	35			TVMO	51			TOS1
4			SCRO	20			CKIN	36			TNDO	52			TST3
5			VDO	21			LTCI	37			TRMO	53			TISI
6			DCS	22			RSYW	38			TST2	54			GND
7			WR	23			PORI	39			SLCK	55			TIS3
8			ACS	24			FRM	40			GND	56			DBCI
9			DO0	25			LSHO	41			TSAI	57			TISI
10			DI0	26			NESY	42			TOS3	58			LCKI
11			DI1	27			CSIN	43			DO2	59			VTGO
12			DI2	28			LTCO	44			DO1	60			CFER
13			DI3	29			FWRE	45			DO3	61			VDD(+5V)
14			HDO	30			CTLI	46			VDD(+5V)	62			SWSI
15			AD0	31			VTGO	47			AD1	63			SWCI
16			AD2	32			SDIN	48			AD1	64			TITO



FUNCTIONAL PIN DEFINITION

Pin No.	SYMBOL	DESCRIPTION
8	ACS	ADDRESS LINE CHIP SELECT INPUT
15	AD0	ADDRESS LINE CHIP SELECT INPUT
48	AD1	ADDRESS LINE CHIP SELECT INPUT
16	AD2	ADDRESS LINE CHIP SELECT INPUT
49	AD3	ADDRESS LINE CHIP SELECT INPUT
17	AD4	ADDRESS LINE CHIP SELECT INPUT
50	BSGN	BUSY GENERATOR OUTPUT
51	CFER	COLOR FRAME ERROR FLAG OUTPUT
20	CKIN	SYSTEM CLOCK INPUT
19	CKO	CLOCK OUTPUT
27	CSIN	COMPOSITE SYNC INPUT
30	CTLI	CTL(TIMER) SIGNAL INPUT (1)
6	DCS	DATA LINE CHIP SELECT INPUT (NEGATIVE-LOGIC)
10	DI0	DATA BUS INPUT (NEGATIVE-LOGIC)
11	DI1	DATA BUS INPUT (NEGATIVE-LOGIC)
12	DI2	DATA BUS INPUT (NEGATIVE-LOGIC)
13	DI3	DATA BUS INPUT (NEGATIVE-LOGIC)
9	DO0	DATA BUS OUTPUT (NEGATIVE-LOGIC)
44	DO1	DATA BUS OUTPUT (NEGATIVE-LOGIC)
45	DO2	DATA BUS OUTPUT (NEGATIVE-LOGIC)
46	DO3	DATA BUS OUTPUT (NEGATIVE-LOGIC)
24	FRM	FRAME SIGNAL OUTPUT (NEGATIVE-LOGIC)
29	FWRE	CTL DIRECTION INPUT
14	HDO	HORIZONTAL SYNC DRIVE OUTPUT
58	LCKI	LTC CLOCK INPUT (SMPT 9.6kHz/EBU 8kHz)
3	LSBO	LTC SYNCHRONOUS SIGNAL B OUTPUT
2	LSCO	LTC SYNCHRONOUS SIGNAL C OUTPUT
1	LSDO	LTC SYNCHRONOUS SIGNAL D OUTPUT
25	LSHO	LTC SYNCHRONOUS SIGNAL H OUTPUT
21	LTCI	LTC INPUT
28	LTCO	LTC SIGNAL OUTPUT
23	NESY	LOST-SYNC FLAG OUTPUT
22	PORI	POWER ON RESET INPUT
4	SCRO	SWITCHES SIGNAL IN CLOCK OUTPUT
32	SDIN	SERIAL DATA INPUT
39	SLCK	SELECT CLOCK INPUT
63	SWCI	SWITCHES SIGNAL C INPUT
34	SWMI	SWITCHES SIGNAL M INPUT
62	SWSI	SWITCHES SIGNAL S INPUT
33	SWVI	SWITCHES SIGNAL V INPUT
5	VDO	VERTICAL SYNC DRIVE OUTPUT
31	VTGO	VITC GATE SIGNAL OUTPUT
59	VTO	VITC SIGNAL OUTPUT (NEGATIVE-LOGIC)
7	WR	WRITE SIGNAL OUTPUT (NEGATIVE-LOGIC)
18	XDB	EXTERNAL DATA BUS IN FLAG OUTPUT (NEGATIVE-LOGIC)
47	VDD	POWER LINE (+5V)
40	GND	GND LINE
54	GND	GND LINE
56	DBCI	TEST INPUT (TO BE CONNECTED WITH GND)
57	TIS1	TEST INPUT (TO BE CONNECTED WITH GND)
55	TIS3	TEST INPUT (TO BE CONNECTED WITH GND)
53	TISI	TEST INPUT (TO BE CONNECTED WITH GND)
51	TOS1	TEST INPUT (TO BE CONNECTED WITH GND)
43	TOS2	TEST INPUT (TO BE CONNECTED WITH GND)
42	TOS3	TEST INPUT (TO BE CONNECTED WITH GND)
41	TSAI	TEST INPUT (TO BE CONNECTED WITH GND)
38	TST2	TEST INPUT (TO BE CONNECTED WITH GND)
52	TST3	TEST INPUT (TO BE CONNECTED WITH GND)
64	TITO	TEST OUTPUT (TO BE LEFT OPEN)
36	TNDO	TEST OUTPUT (TO BE LEFT OPEN)
37	TRMO	TEST OUTPUT (TO BE LEFT OPEN)
35	TVMO	TEST OUTPUT (TO BE LEFT OPEN)

#32 SDIN

LSDO	LSCO	LSBO	SDIN	FUNCTION
0	0	0	0	INCREASE IN BIT 'FR' OF U1'
0	0	0	1	INCREASE IN BIT 'FT' OF U2'
0	0	1	0	INCREASE IN BIT 'SE' OF U3'
0	0	1	1	INCREASE IN BIT 'ST' OF U4'
0	1	0	0	INCREASE IN BIT 'MN' OF U5'
0	1	0	1	INCREASE IN BIT 'MT' OF U6'
0	1	1	0	INCREASE IN BIT 'HR' OF U7'
0	1	1	1	INCREASE IN BIT 'HT' OF U8'

NOTE: INFLUENCED BIT IS DECIDED BY FIRST 2 BITS OF SWCI.

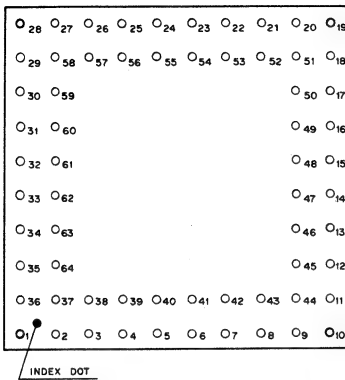
#33 SWVI

LSDO	LSCO	LSBO	SWVI	FUNCTION
0	0	0	0	SW1A
0	0	0	1	SW1B
0	0	1	0	SW1C
0	0	1	1	SW1D
0	1	0	0	SW2A
0	1	0	1	SW2B
0	1	1	0	SW2C
0	1	1	1	SW2D

†: VITC POSITION SELECT

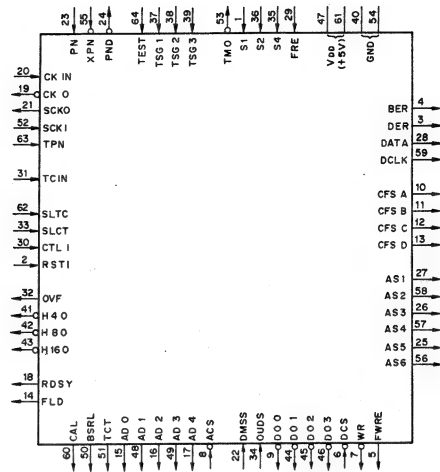
SW1D	SW1C	SW1B	SW1A	INSERTION LINE		
SW2D	SW2C	SW2B	SW2A	NTSC	PAL	SECAM
0	0	0	0	LINE 25	LINE 26	22.335
0	0	0	1	24	24	21.333
0	0	1	0	23	20	20.333
0	0	1	1	22	19	19.332
0	1	0	0	21	18	18.331
0	1	0	1	20	17	17.330
0	1	1	0	19	16	16.329
0	1	1	1	18	15	15.328
1	0	0	0	17	14	14.327
1	0	0	1	16	13	13.326
1	0	1	0	15	12	12.325
1	0	1	1	14	11	11.324
1	1	0	0	13	10	10.323
1	1	0	1	12	9	9.322
1	1	1	0	11	8	8.321
1	1	1	1	10	7	7.320

CX7912 (SONY)
CX7912A (SONY)
C-MOS TIME CODE READER
— TOP VIEW —



PIN ASSIGNMENT


PIN	IN	OUT	SYMBOL	PIN	IN	OUT	SYMBOL	PIN	IN	OUT	SYMBOL	PIN	IN	OUT	SYMBOL
1	○		S1	17	○		AD 4	33	○		SCLT	49	○		AD 3
2	○		RS1	18	○		ROSY	34	○		ODS	50	○		BSRL
3	○		DER	19	○		CK 0	35	○		S4	51	○		TCT
4	○		BER	20	○		CK IN	36	○		S2	52	○		SKCI
5	○		FWRE	21	○		SKCO	37	○		TSG 1	53	○		TMO
6	○		DCS	22	○		DMSS	38	○		TSG 2	54	○		GND
7	○		WR	23	○		PN	39	○		TSG 3	55	○		XPN
8	○		ACS	24	○		PND	40	○		GND	56	○		AS6
9	○		DO 0	25	○		AS 5	41	○		H 4 0	57	○		AS 4
10	○		CFS A	26	○		AS 3	42	○		H 8 0	58	○		AS 2
11	○		CFS B	27	○		AS 1	43	○		H 16 0	59	○		DCL
12	○		CFS C	28	○		DATA	44	○		DO 1	60	○		CAL
13	○		CFS D	29	○		FRATE	45	○		DO 2	61	○		VPDP(SV)
14	○		FLD	30	○		CTL 1	46	○		DO 3	62	○		SLTC
15	○		AD 0	31	○		TC IN	47	○		VPDP(SV)	63	○		TPN
16	○		AD 2	32	○		OVF	48	○		AD 1	64	○		TEST



MODE SELECT

SLCT	SLTC	MODE
0	0	AUTO
0	1	TIME CODE
1	0	CTL
1	1	AUTO

CTL COUNT

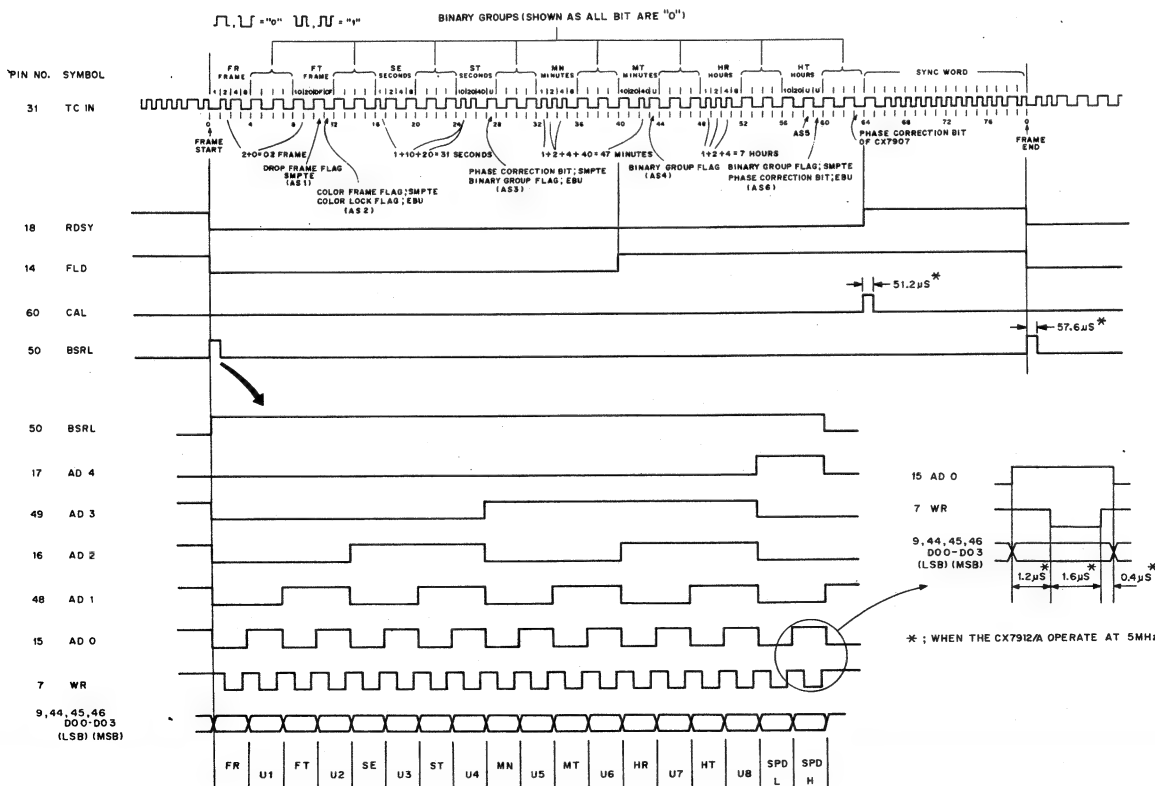
FRE	RSTI	COUNT
0	X	DOWN COUNT
1	X	UP COUNT
X		RESET

SIGNAL FORMAT SELECT

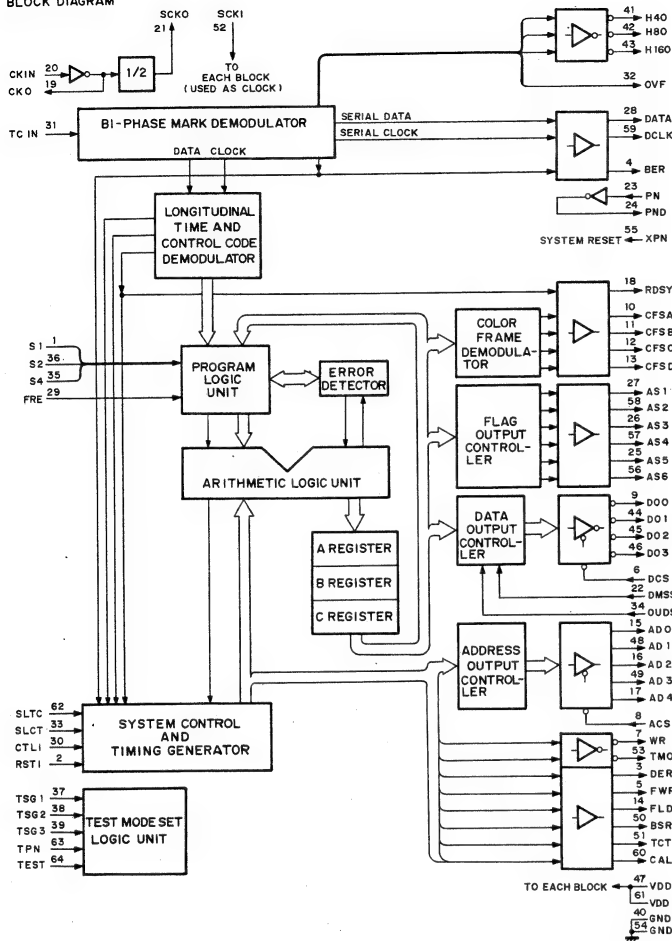
S4	S2	S1	FORMAT	FRAME
0	0	0	FILM	24
0	0	1	NOT ALLOWED	—
0	1	0		
0	1	1		
1	0	0	PAL, SECAM	25
1	0	1	NOT ALLOWED	—
1	1	0	NTSC (NON DROP FRAME)	30
1	1	1	NTSC (DROP FRAME)	30

0: LOW LEVEL
1: HIGH LEVEL
X: DON'T CARE

TIMING CHART



BLOCK DIAGRAM



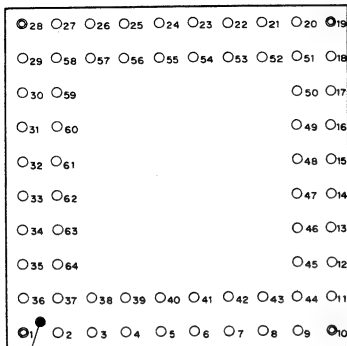
FUNCTIONAL PIN DEFINITION

Pin No.	SYMBOL	DESCRIPTION
8	ACS	ADDRESS LINE OUTPUT ENABLE (NEGATIVE-LOGIC)
15	AD0	ADDRESS DATA OUTPUT
48	AD1	
16	AD2	
49	AD3	
17	AD4	PARALLEL DATA OUTPUT
27	AS1	
58	AS2	
26	AS3	
57	AS4	BI-PHASE MARK ERROR (BIT ERROR) OUTPUT
25	AS5	
56	AS6	
4	BER	
50	BSRL	DATA OUT FLAG OUTPUT
60	CAL	CALCULATE OUT FLAG OUTPUT
10	CPSA	DEMODULATED COLOR FRAME OUTPUT
11	CPSB	
12	CPSC	
13	CPSD	
20	CKIN	CLOCK INPUT
19	CKO	CLOCK OUTPUT (NEGATIVE-LOGIC)
30	CTLI	CTL SIGNAL INPUT (1)
28	DATA	DEMODULATED SERIAL DATA OUTPUT
59	DCLK	DEMODULATED CLOCK OUTPUT
6	DCS	DATA LINE OUTPUT ENABLE (NEGATIVE-LOGIC)
3	DER	DEMODULATE DATA ERROR OUTPUT
22	DMSS	ASSIGNED DATA SELECT
9	DO0	DATA OUTPUT (NEGATIVE-LOGIC)
44	DO1	
45	DO2	
46	DO3	
14	FLD	FIELD DATA OUTPUT
29	FWRE	CTL DIRECTION SIGNAL INPUT
5	FWRE	DEMODULATE DIRECTION SIGNAL OUTPUT
41	H40	SPEED RANGE FLAG 4 OUTPUT (NEGATIVE-LOGIC)
42	H80	SPEED RANGE FLAG 8 OUTPUT (NEGATIVE-LOGIC)
43	H160	SPEED RANGE FLAG 16 OUTPUT (NEGATIVE-LOGIC)
34	OUDS	ERROR BYPASS ON/OFF SELECT
32	OVF	OVERFLOW FLAG OUTPUT
23	PN	POWER ON SIGNAL INPUT
24	PND	POWER ON SIGNAL OUTPUT (NEGATIVE-LOGIC)
18	RDSY	READ SYNC WORD DATA OUTPUT
2	RSTI	CTL TIMER RESET INPUT (1)
1	S1	SIGNAL FORMAT SELECT S1
36	S2	SIGNAL FORMAT SELECT S2
35	S4	SIGNAL FORMAT SELECT S4
52	SCKI	SYSTEM CLOCK INPUT
21	SCKO	SYSTEM CLOCK OUTPUT
33	SLCT	SELECT CTL INPUT
62	SLTC	SELECT LTC INPUT
55	XPN	SYSTEM RESET SIGNAL INPUT (NEGATIVE-LOGIC)
31	TCIN	LONGITUDINAL TIME AND CONTROL CODE INPUT
51	TCT	INPUT SELECT FLAG OUTPUT
53	TMO	TIME OVER SIGNAL OUTPUT (NEGATIVE-LOGIC)
37	TSG1	WRITE SIGNAL OUTPUT (NEGATIVE-LOGIC)
38	TSG2	TEST MODE SET INPUT (TO BE CONNECTED WITH GND)
39	TSG3	
47	VDD	POWER LINE (+5V)
61	VDD	GND LINE
40	GND	
54	GND	
64	GND	
63	TEST	TEST MODE SET INPUT (TO BE CONNECTED WITH GND)
37	TPN	
37	TSG1	
38	TSG2	
39	TSG3	TEST MODE SET INPUT (TO BE CONNECTED WITH GND)
47	VDD	
61	VDD	
40	GND	
54	GND	
64	GND	

CX7913 (SONY)

C-MOS VITC (VERTICAL INTERVAL TIME CODE) READER

- TOP VIEW -

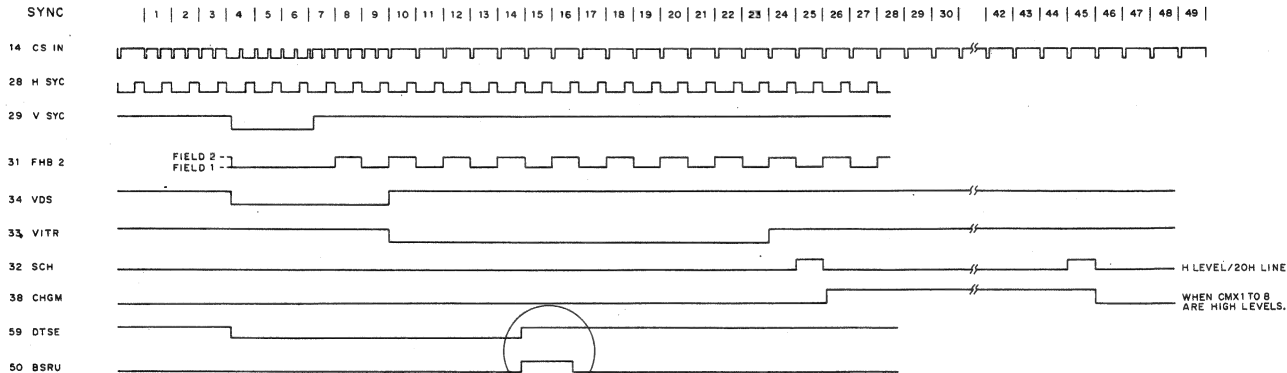


INDEX DOT

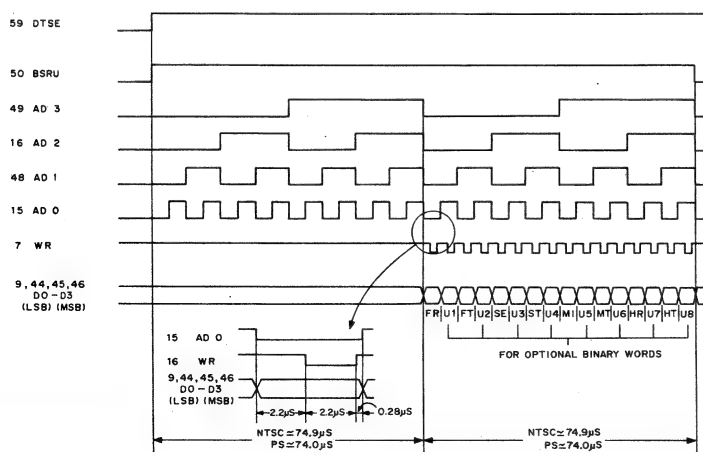
PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1			CMX 1	17			VIUD	33			VITR	49			AD 3
2			CMX 2	18			VITC	34			VDS	50			BSRU
3			CMX 4	19			CK IN	35			FBS 3	51			D CLK
4			CMX 8	20			CK IN	36			FBS 1	52			TS C
5			TS A	21			SCK 0	37			FBS 2	53			TS D
6			D CS	22			DMSS	38			CHGM	54			GND
7			WR	23			PN	39			TS B	55			TS B
8			A CS	24			RVIT	40			GND	56			HT 8
9			D O	25			HT 4	41			TS 1	57			MT 8
10			CFS A	26			ST 8	42			TS 2	58			FT 8
11			CFS B	27			FT 4	43			TS 3	59			DTSE
12			CFS C	28			H SYNC	44			D 1	60			FLDT
13			CFS D	29			V SYNC	45			D 2	61			VDD(+5V)
14			CS IN	30			NESY	46			D 3	62			FRE
15			AD 0	31			FHB 2	47			VDD(+5V)	63			SDWN
16			AD 2	32			SCH	48			AD 1	64			SLLM

TIMING CHART

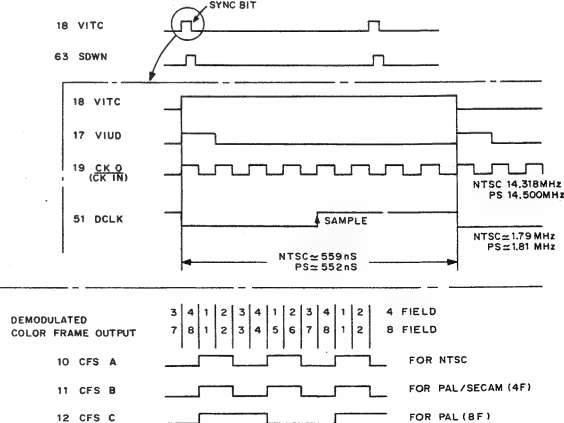
SYNC



DATA OUTPUT



DEMODULATED



#36,37,35 FBS1-FBS3 FIELD BIT DATA SELECT

FBS 3	FBS 2	FBS 1	#60 FLDT. OUTPUTS
0	0	0	FT 4
0	0	1	FT 8
0	1	0	ST 8
0	1	1	MT 8
1	0	0	HT 4
1	0	1	HT 8
1	1	0	---
1	1	1	---

#1,2,3,4 CHARACTER MIX TIMING SELECT

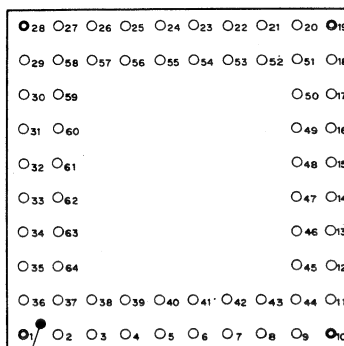
CMX 8	CMX 4	CMX 2	CMX 1	INSERTION LINES(#38 CHGM IS HIGH)	
				NTSC	PAL/SECAM
0	0	0	0	---	---
0	0	0	1	---	---
0	0	1	0	---	---
0	0	1	1	---	263 ~ 282 , 575 ~ 594
0	1	0	0	246 ~ 265	243 ~ 262 , 555 ~ 574
0	1	0	1	226 ~ 245	223 ~ 242 , 535 ~ 554
0	1	1	0	206 ~ 225	203 ~ 222 , 515 ~ 534
0	1	1	1	186 ~ 205	183 ~ 202 , 495 ~ 514
1	0	0	0	166 ~ 185	163 ~ 182 , 475 ~ 494
1	0	0	1	146 ~ 165	143 ~ 162 , 455 ~ 474
1	0	1	0	126 ~ 145	123 ~ 142 , 435 ~ 454
1	0	1	1	106 ~ 125	103 ~ 122 , 415 ~ 434
1	1	0	0	86 ~ 105	83 ~ 102 , 395 ~ 414
1	1	0	1	66 ~ 85	63 ~ 82 , 375 ~ 394
1	1	1	0	46 ~ 65	43 ~ 62 , 355 ~ 374
1	1	1	1	26 ~ 45	23 ~ 42 , 335 ~ 354

NOTE 0; LOW LEVEL
1; HIGH LEVEL

FUNCTIONAL PIN DEFINITION

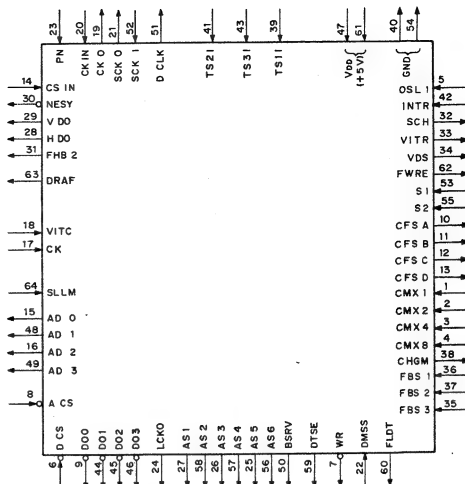
Pin No.	SYMBOL	DESCRIPTION
8	A CS	ADDRESS LINE CHIP SELECT INPUT (NEGATIVE-LOGIC)
15	AD 0	ADDRESS LINE
48	AD 1	
16	AD 2	
49	AD 3	
50	BSRU	DATA BUS OUTPUT STATE
10	CFS A	DEMODULATED COLOR FRAME OUTPUT
11	CFS B	
12	CFS C	
13	CFS D	
38	CHGM	CHARACTER MIX GATE SIG OUTPUT
20	CK IN	CLOCK IN
19	CK O	CLOCK OUT
1	CMX 1	CHARACTER MIX TIMING SELECT INPUT
2	CMX 2	
3	CMX 4	
4	CMX 8	
14	CS IN	COMPOSITE SYNC (C SYNC) INPUT
51	D CLK	DATA SAMPLING CLOCK OUTPUT
6	D CS	DATA LINE CHIP SELECT (NEGATIVE-LOGIC)
22	DMSS	DATA MIX/SEPARATE SELECT INPUT
9	D 0	PARALLEL OUTPUT DATA LINE (NEGATIVE-LOGIC)
44	D 1	
45	D 2	
46	D 3	
69	DTSE	VALID DATA OUTPUT STATE
36	FBS 1	FIELD BIT DATA SELECT
37	FBS 2	
35	FBS 3	
31	FHB 2	1/2 H SYNC OUTPUT
60	FLDT	FIELD BIT DATA OUTPUT
62	FRE	FORWARD/REVERSE OUTPUT (LOW LEVEL; FORWARD)
27	FT 4	SPECIFIED BIT DATA OUTPUT
58	FT 8	
28	H SYNC	H SYNC OUTPUT
25	HT 4	SPECIFIED BIT DATA OUTPUT
56	HT 8	
57	MT 8	
30	NESY	C SYNC INPUT STATE (NEGATIVE-LOGIC)
23	PN	RESET INPUT
24	RVIT	SERIAL OUTPUT DATA LINE
32	SCH	CHARACTER MIX GATE OUTPUT
21	SCK 0	SYSTEM CLOCK OUTPUT (1/16 CLOCK)
52	SCK 1	SYSTEM CLOCK INPUT
63	SOWN	INTERNAL SYNC OUTPUT
64	SLLM	READ SIZE SELECT
26	ST 8	SPECIFIED BIT DATA OUTPUT
24	VDS	INTERNAL SYNC OUTPUT
18	VITC	CLIPPED VIDEO INPUT
33	VITR	VITC READ STATE OUTPUT (NEGATIVE-LOGIC)
17	VIUD	CLIPPED VIDEO EDGE INPUT
29	V SYNC	V SYNC OUTPUT
7	WR	WRITE SIGNAL OUTPUT (NEGATIVE-LOGIC)
47	VDD	DC +5V SUPPLY
61	VDD	
40	GND	
54	GND	
41	TS 1	TEST INPUT (CONNECT WITH GND)
42	TS 2	
43	TS 3	
5	TS A	
39	TS B	
53	TS C	
55	TS D	

CX7913A (SONY)
C-MOS VITC (VERTICAL INTERVAL TIME CODE) READER
— TOP VIEW —

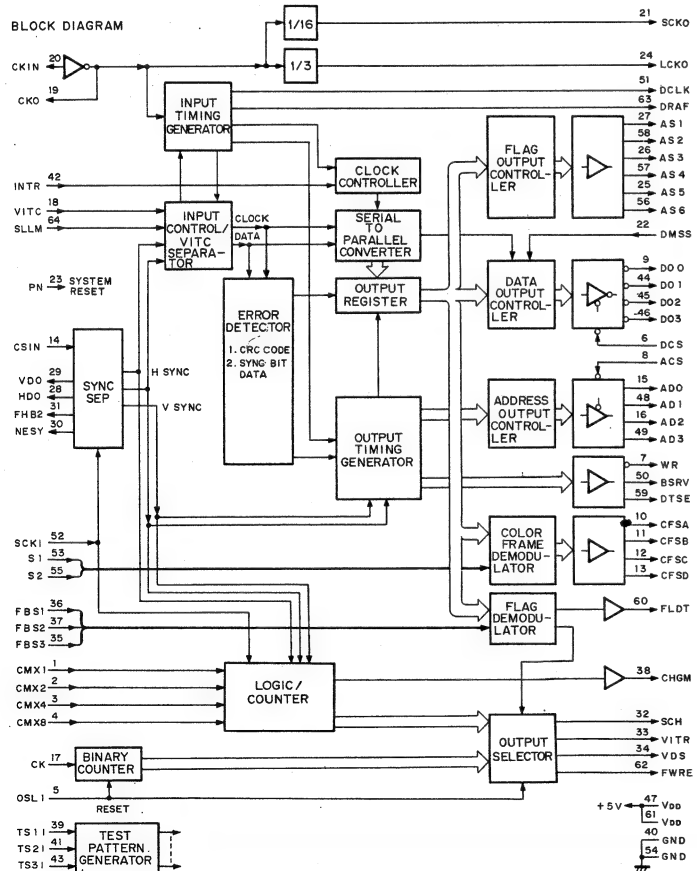


INDEX DOT

PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL	PIN NO.	IN	OUT	SYMBOL
1			CMX 1	17			CK	33			VITC	49			AD 3
2			CMX 2	18			VITC	34			VDS	50			BSRV
3			CMX 4	19			CK 0	35			FBS 3	51			D CLK
4			CMX 8	20			CK IN	36			FBS 1	52			SCK 1
5			OSL 1	21			SCK 0	37			FBS 2	53			S1
6			D CS	22			DMSS	38			CHGM	54			GND
7			WR	23			PN	39			TS11	55			S2
8			ACS	24			LCKO	40			GND	56			AS6
9			DOO	25			AS5	41			TS21	57			AS4
10			CFS A	26			AS3	42			INTR	58			AS2
11			CFS B	27			AS1	43			TS31	59			DTSE
12			CFS C	28			HDO	44			DO1	60			FLDT
13			CFS D	29			VDO	45			DO2	61			VDD(+5V)
14			CS IN	30			NESY	46			DO3	62			FWRE
15			AD 0	31			FHB 2	47			VDD(+5V)	63			DRAF
16			AD 2	32			SCH	48			AD 1	64			SLLM



BLOCK DIAGRAM



FUNCTIONAL PIN DEFINITION

Pin No.	SYMBOL	DESCRIPTION
8	ACS	ADDRESS LINE ENABLE INPUT
15	AD0	
48	AD1	
16	AD2	ADDRESS DATA OUTPUT
49	AD3	
27	AS1	
58	AS2	
26	AS3	PARALLEL DATA OUTPUT
57	AS4	
25	AS5	
56	AS6	
50	BSRV	DATA OUT FLAG OUTPUT
10	CPSA	
11	CFSB	DEMODULATED COLOR FRAME OUTPUT
12	CFSC	
13	CFSD	
38	CHGM	CHARACTER V POSITION GATE SIGNAL OUTPUT
17	CK	INTERNAL COUNTER CLOCK INPUT
20	CKIN	CLOCK INPUT
19	CKO	CLOCK OUTPUT (NEGATIVE-LOGIC)
2	CMX1	
3	CMX2	
4	CMX4	CHARACTER V POSITION SELECT INPUT
14	CSIN	COMPOSITE SYNC INPUT
51	DCLK	VITC READ CLOCK OUTPUT
6	DCS	DATA LINE ENABLE INPUT
22	DMSS	ASSIGNED BIT DATA SELECT INPUT
9	DOO	
44	DO1	DATA OUT (NEGATIVE-LOGIC)
45	DO2	
46	DO3	
63	DRAF	VITC SYNCHRONIZE SIGNAL D OUTPUT
59	DTSE	VITC DATA SEARCH FLAG OUTPUT
36	FBS1	FIELD MARK POSITION SELECT 1 INPUT
37	FBS2	FIELD MARK POSITION SELECT 2 INPUT
35	FBS3	FIELD MARK POSITION SELECT 3 INPUT
31	FHB2	PH/2 SIGNAL OUTPUT
60	FLDT	FIELD DATA OUTPUT
62	FWRE	TAPE DIRECTION SIGNAL OUTPUT
28	HDO	HORIZONTAL SYNC DRIVE OUTPUT
42	INTR	INTERRUPT REQUEST INPUT
24	LCKO	LTC CLOCK OUTPUT
30	NESY	LOST-SYNC FLAG OUTPUT
5	OSL1	OUTPUT SIGNAL SELECT 1 INPUT
23	PN	POWER ON RESET INPUT
53	S1	SIGNAL FORMAT SELECT S1 INPUT
55	S2	SIGNAL FORMAT SELECT S2 INPUT
32	SCH	OUTPUT SIGNAL SCH
52	SCK1	SYSTEM CLOCK INPUT
21	SCKO	SYSTEM CLOCK OUTPUT
64	SLLM	READ SIZE SELECT INPUT
29	VDO	VERTICAL SYNC DRIVE OUTPUT
34	VDS	OUTPUT SIGNAL VDS
18	VITC	VITC SIGNAL INPUT
33	VITR	OUTPUT SIGNAL VITR
7	WR	WRITE SIGNAL OUTPUT (NEGATIVE-LOGIC)
47	VDD	POWER LINE (+5V)
61	VDD	
40	GND	GND LINE
54	GND	
39	TS11	
41	TS21	TEST INPUT
43	TS31	

#1,2,3,4 CMX1 TO 8; CHARACTER V POSITION SELECT

CMX8	CMX4	CMX2	CMX1	INSERTION LINE (#38 CHGM IS H LEVEL)	
				NTSC	PAL/SECAM
0	0	0	0	----	284-303
0	0	0	1	----	596-615
0	0	1	0	----	264-283
0	0	1	1	----	576-595
0	0	1	1	----	244-263
0	1	0	0	227-246	224-243
0	1	0	1	207-226	536-555
0	1	1	0	187-206	204-223
0	1	1	1	167-186	516-535
1	0	0	0	147-166	184-203
1	0	0	1	127-146	496-515
1	0	1	0	107-126	164-183
1	0	1	1	87-106	476-495
1	1	0	0	67- 86	144-163
1	1	0	1	47- 66	456-475
1	1	1	0	27- 46	124-143
1	1	1	1	----	436-455

#36,37,35 FBS1 TO FBS3; FIELD DATA SELECT

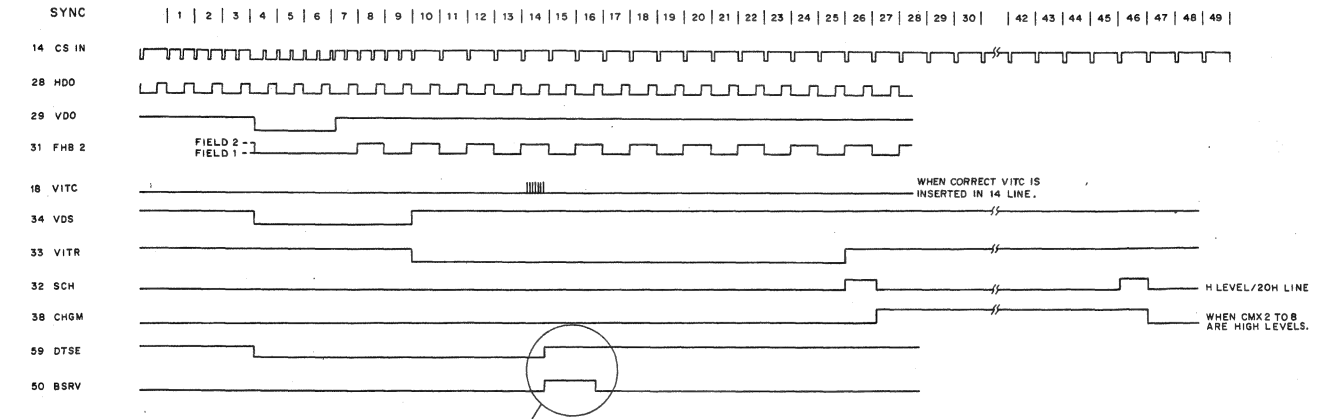
FBS3	FBS2	FBS1	#60 FLDT OUTPUT
0	0	0	AS1 (VITC BIT No.14)
0	0	1	AS2 (VITC BIT No.15)
0	1	0	AS3 (VITC BIT No.35)
0	1	1	AS4 (VITC BIT No.55)
1	0	0	AS5 (VITC BIT No.74)
1	0	1	AS6 (VITC BIT No.75)
1	1	0	-----
1	1	1	-----

#53,55 S1,S2; SIGNAL FORMAT SELECT

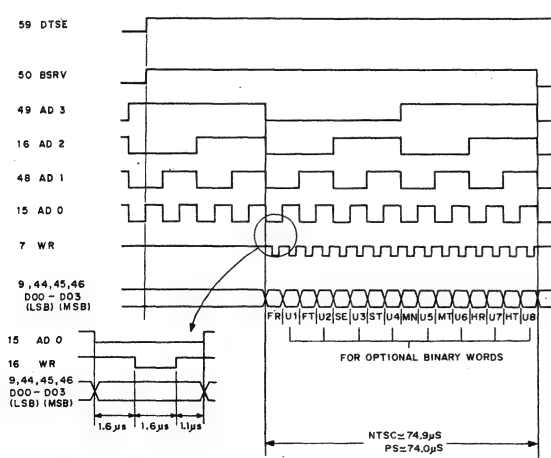
S2	S1	#13 CFSD FORMAT
0	0	UNSPECIFIED
0	1	UNSPECIFIED
1	0	NTSC NON DROP FRAME
1	1	NTSC DROP FRAME

0; LOW LEVEL
1; HIGH LEVEL

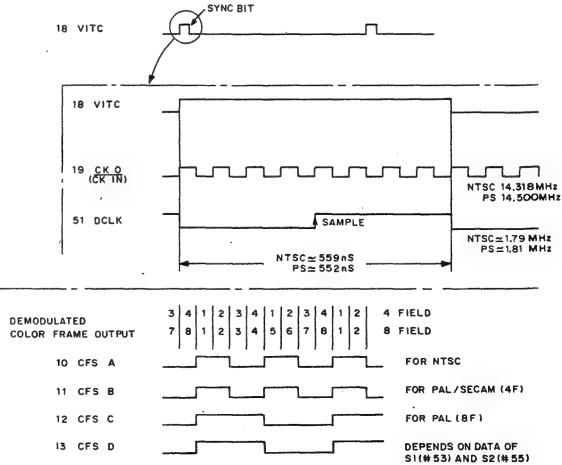
TIMING CHART



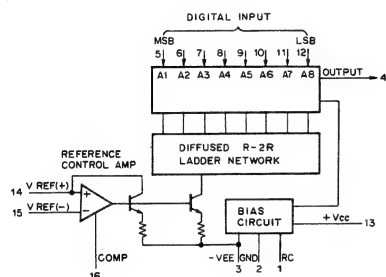
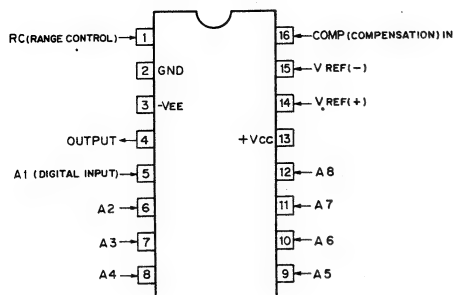
DATA OUTPUT



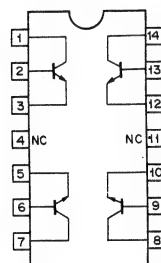
DEMODULATED



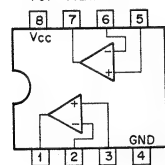
DAC-IC88C (DATEL)
8-BIT DIGITAL-TO-ANALOG CONVERTER
— TOP VIEW —



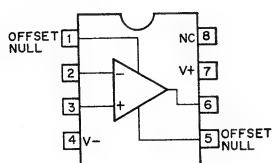
FT5709M (FUJITSU)
TRANSISTOR ARRAY
— TOP VIEW —



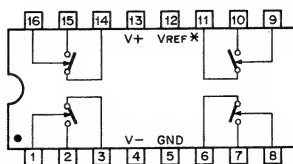
HA17458GS (HITACHI)
OPERATIONAL AMPLIFIER
— TOP VIEW —



HA17741GS (HITACHI)
OPERATIONAL AMPLIFIER
— TOP VIEW —



H11-0201-5 (HARRIS)
H11-201 (HARRIS)
C-MOS ANALOG SWITCH
— TOP VIEW —



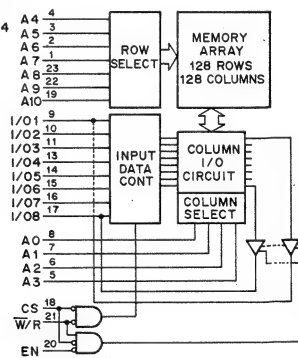
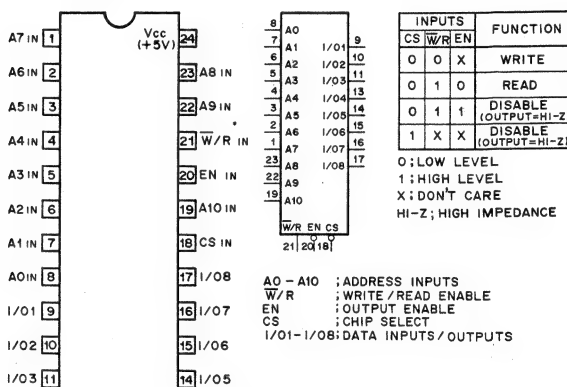
CONT IN	SW
0	—○—
1	—○—

0; LOW LEVEL
1; HIGH LEVEL

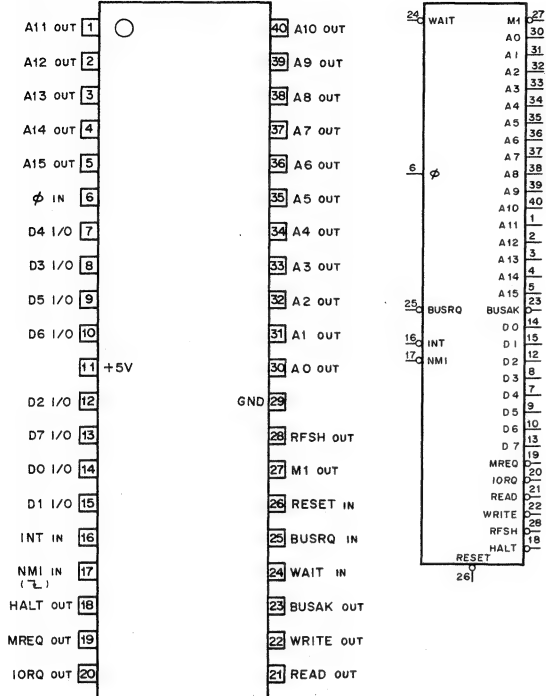
* NOTE

INTERFACE	VREF CONNECTION
TTL	OPEN
C-MOS	VDD ≤ 5.5V; OPEN
	VDD > 5.5V; TO VDD

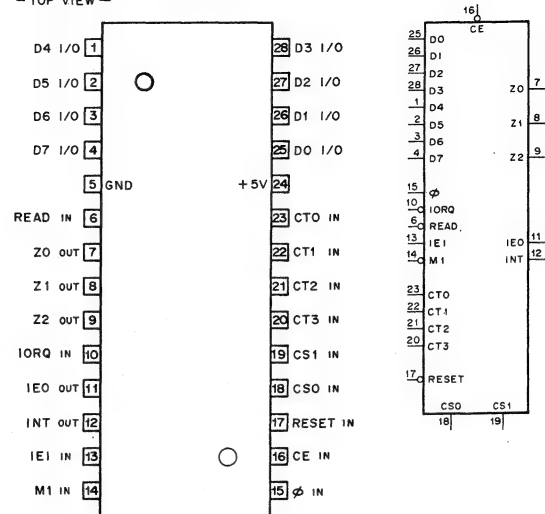
HM6116LP-2 (HITACHI) (ACCESS TIME = 120 ns)
HM6116LP-3 (HITACHI) (ACCESS TIME = 150 ns)
HM6116LP-4 (HITACHI) (ACCESS TIME = 200 ns)
MSM5128-12RS (OKI) (ACCESS TIME = 120 ns)
MSM5128-15RS (OKI) (ACCESS TIME = 150 ns)
MSM5128-20RS (OKI) (ACCESS TIME = 200 ns)
C-MOS 16384(2048x8)-BIT HIGH SPEED STATIC RAM
— TOP VIEW —



LH0080 (SHARP)
 LH0080A (SHARP)
 μ PD780C (NEC)
 μ PD780C-1 (NEC)
 Z80 (ZILOG)
 Z80A (ZILOG)
 N-MOS 8-BIT MICROPROCESSOR
 - TOP VIEW -



LH0082 (SHARP)
 LH0082A (SHARP)
 Z80-CTC (ZILOG)
 Z80A-CTC (ZILOG)
 N-MOS COUNTER TIMER CIRCUIT
 - TOP VIEW -

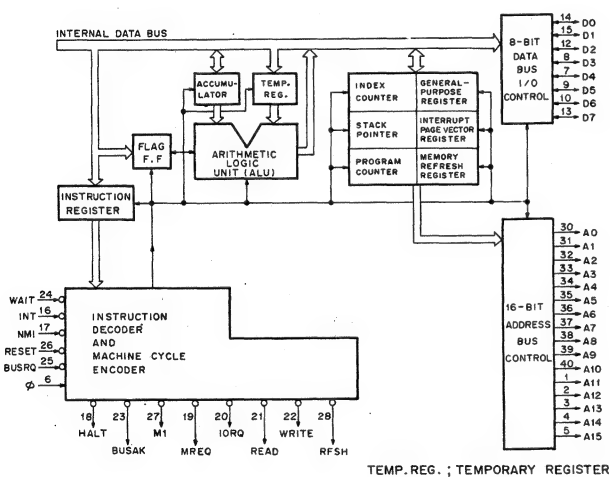


phi : SYSTEM CLOCK
 CE : CHIP ENABLE
 CS0, CS1 : CHANNEL SELECT
 CT0-CT3 : EXTERNAL CLOCK/TIMER TRIGGER
 D0-D7 : 3-STATE DATA INPUT/OUTPUT
 IEI : INTERRUPT ENABLE INPUT
 IEO : INTERRUPT ENABLE OUTPUT
 INT : INTERRUPT REQUEST (OPEN DRAIN)
 IORQ : I/O REQUEST
 M1 : MACHINE CYCLE 1
 READ : READ CYCLE STATUS
 Z0-Z2 : ZERO COUNT/TIME OUT

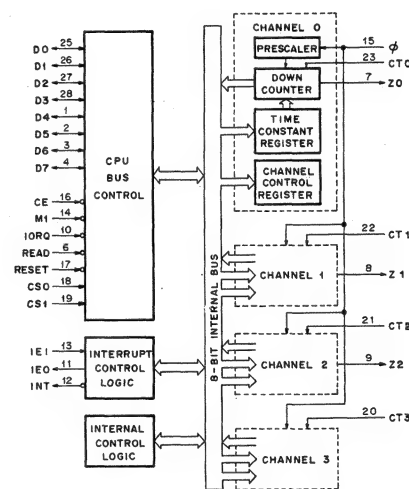
CHANNEL SELECT FUNCTION

CS1	CS0	SELECTED CHANNEL
0	0	0
0	1	1
1	0	2
1	1	3

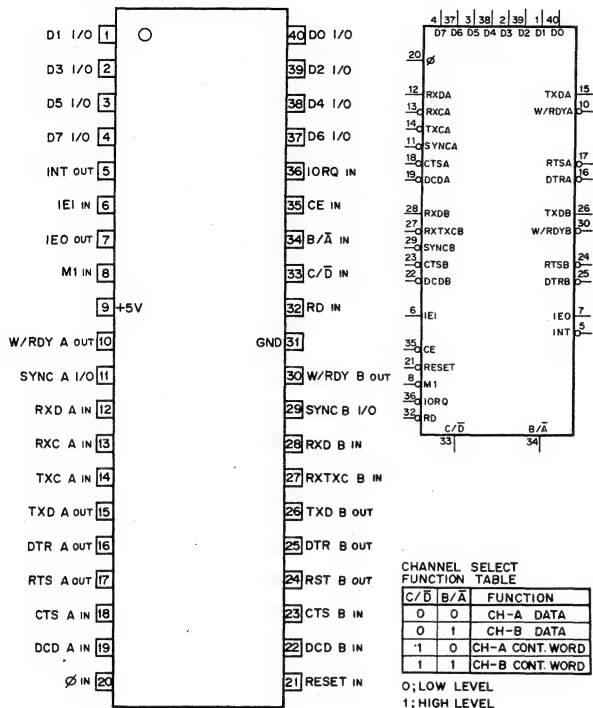
0; LOW LEVEL
 1; HIGH LEVEL



phi : CLOCK
 A0-A15 : 3-STATE ADDRESS OUTPUT
 BUSAK : BUS ACKNOWLEDGE
 BUSRQ : BUS REQUEST
 D0-D7 : 3-STATE DATA INPUT/OUTPUT
 HALT : HALT STATE
 INT : INTERRUPT REQUEST
 IORQ : 3-STATE I/O REQUEST
 M1 : MACHINE CYCLE 1
 MREQ : 3-STATE MEMORY REQUEST
 NMI : NON-MASKABLE INTERRUPT (DOWN EDGE TRIGGER)
 READ : 3-STATE MEMORY READ
 RFSH : REFRESH
 WRITE : 3-STATE MEMORY WRITE



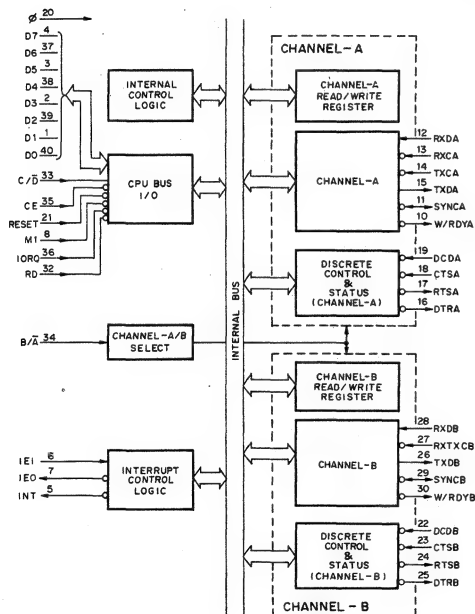
LH0084 (SHARP)
 LH0084A (SHARP)
 Z80-SIO/O (ZILOG)
 Z80A-SIO/O (ZILOG)
 N-MOS 2-CHANNEL SERIAL INPUT/OUTPUT
 FOR MICROCOMPUTER SYSTEM
 — TOP VIEW —



CHANNEL SELECT
FUNCTION TABLE

C/D	B/A	FUNCTION
0	0	CH-A DATA
0	1	CH-B DATA
1	0	CH-A CONT. WORD
1	1	CH-B CONT. WORD

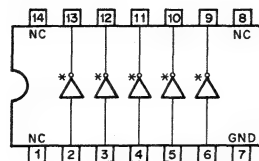
0: LOW LEVEL
1: HIGH LEVEL



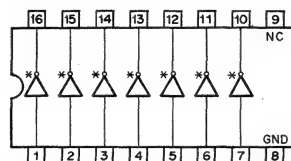
\emptyset : SYSTEM CLOCK IN
 D7-D0 : DATA I/O
 C/D : CONTROL/DATA SELECT IN
 CE : CHIP ENABLE IN
 M1 : MACHINE CYCLE 1 IN
 IORQ : I/O REQUEST IN
 RD : READ IN
 B/A : CHANNEL B/A SELECT IN
 IEI : INTERRUPT ENABLE IN
 IEO : INTERRUPT ENABLE OUT
 INT : INTERRUPT OUT

RXD : RECEIVE DATA IN
 RXC : RECEIVE CLOCK IN
 TXC : TRANSMIT CLOCK IN
 TXD : TRANSMIT DATA OUT
 SYNC : EXTERNAL CHARACTER SYNCHRONIZATION I/O
 W/RDY : WAIT/READY OUT
 DCD : DATA CARRIER DETECT IN
 CTS : CLEAR TO SEND IN
 RTS : REQUEST TO SEND OUT
 DTR : DATA TERMINAL READY OUT

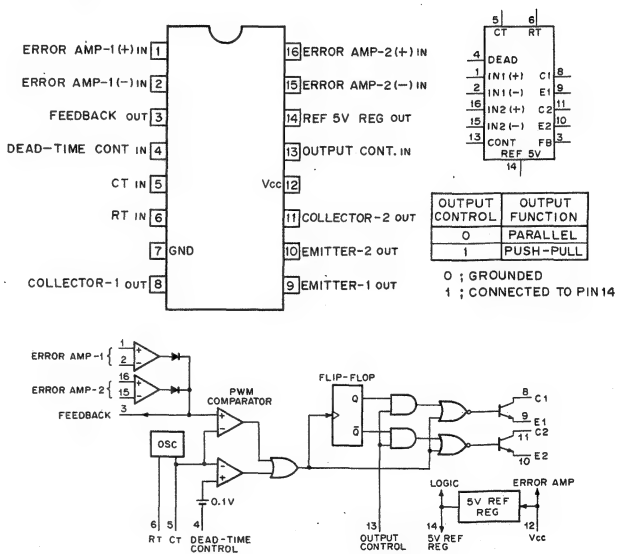
M54516P (MITSUBISHI)
 INVERTER WITH OPEN-COLLECTOR
 (DARLINGTON-CONNECTED TRANSISTOR ARRAY)
 — TOP VIEW —



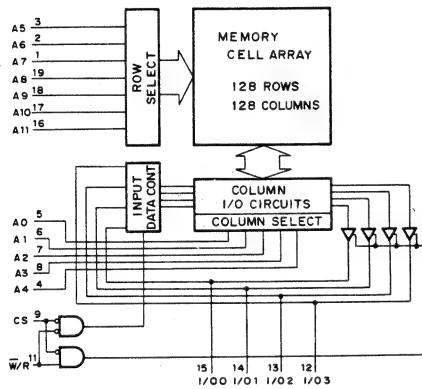
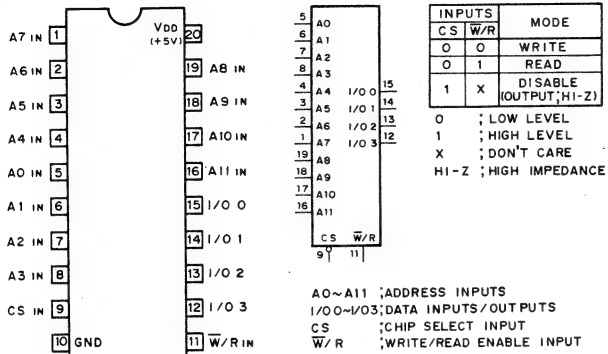
M54517P (MITSUBISHI)
 INVERTER WITH OPEN-COLLECTOR
 (DARLINGTON-CONNECTED TRANSISTOR ARRAY)
 — TOP VIEW —



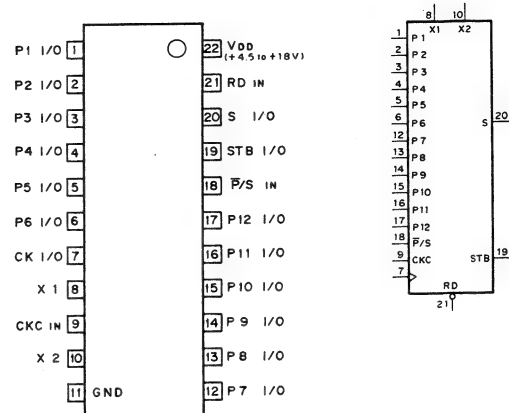
MB3759 (FUJITSU)
 PWM POWER CONTROL
 — TOP VIEW —



HM6168HP-45 (HITACHI) (ACCESS TIME = 45 nS)
 HM6168HP-55 (HITACHI) (ACCESS TIME = 55 nS)
 HM6168HP-70 (HITACHI) (ACCESS TIME = 70 nS)
 MB8168-45 (FUJITSU) (ACCESS TIME = 45 nS)
 MB8168-55 (FUJITSU) (ACCESS TIME = 55 nS)
 MB8168-70 (FUJITSU) (ACCESS TIME = 70 nS)
 MB8168-90 (FUJITSU) (ACCESS TIME = 90 nS)
 N-MOS 16384-BIT (4096x4) STATIC RAM
 — TOP VIEW —



MB8747 (FUJITSU)
 C-MOS SERIAL TO/FROM PARALLEL CONVERTER WITH OSCILLATOR
 — TOP VIEW —

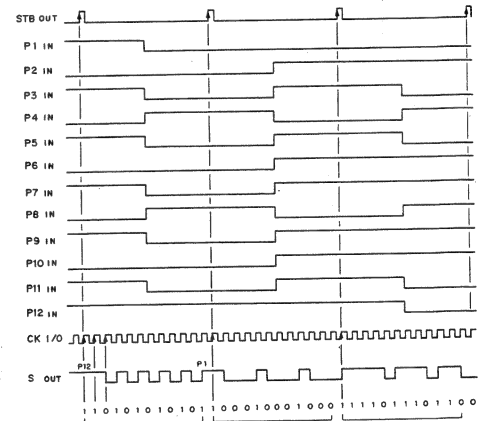


P1 to P12 : PARALLEL DATA IN/OUT
 CK : CLOCK IN/OUT
 CKC : CLOCK I/O CONTROL IN
 X1, X2 : X'TAL
 P/S : PARALLEL/SERIAL CONTROL IN
 STB : STROBE
 S : SERIAL DATA IN/OUT

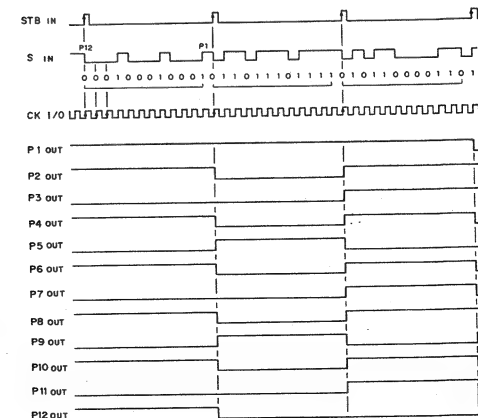
CKC	CK	RD	P/S	MODE	P1toP12	S	STB
0	OUT	0	0	OPEN	IN	HI-Z	OUT
1	IN	0	1	RESET	0	IN	IN
		1	0	P→S	IN	OUT	OUT
		1	1	S→P	OUT	IN	IN

0 : LOW LEVEL
 1 : HIGH LEVEL
 HI-Z : HIGH IMPEDANCE
 P→S : PARALLEL→SERIAL CONV
 S→P : SERIAL→PARALLEL CONV

F/S = 0 RD=1 (PARALLEL→SERIAL CONV)

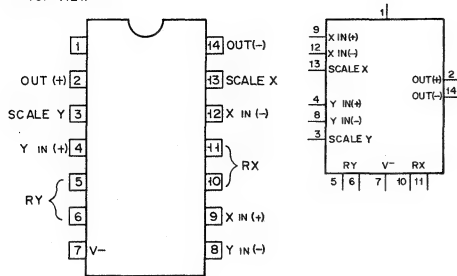


F/S = 1 RD=1 (SERIAL→PARALLEL CONV)



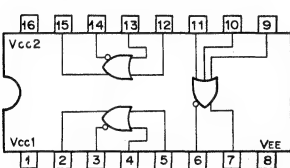
MC1595L (MOTOROLA)
LINEAR MULTIPLIER

—TOP VIEW—



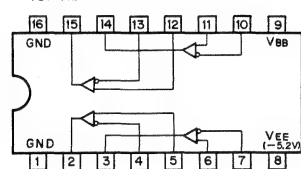
MC10105L (MOTOROLA)
HD10105 (HITACHI)
ECL 2-3-2-INPUT OR/NOR GATE

—TOP VIEW—



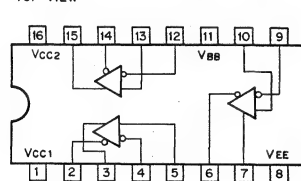
MC10115L (MOTOROLA)
ECL LINE RECEIVER

—TOP VIEW—



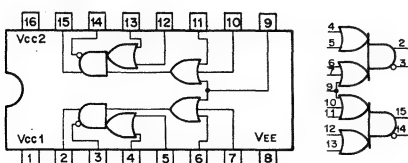
MC10116L (MOTOROLA)
HD10116 (HITACHI)
ECL DIFFERENTIAL OR/NOR LINE RECEIVER

—TOP VIEW—



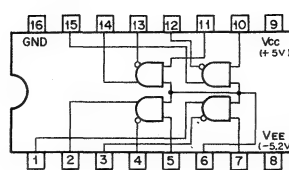
MC10117L (MOTOROLA)
HD10117 (HITACHI)
ECL 2-WIDE 2-3-INPUT OR-AND/OR-AND-INVERT GATE

—TOP VIEW—



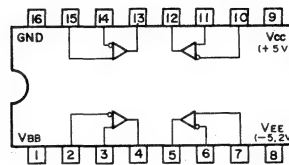
MC10124L (MOTOROLA)
HD10124 (HITACHI)
ECL TTL-TO-ECL TRANSLATOR

—TOP VIEW—



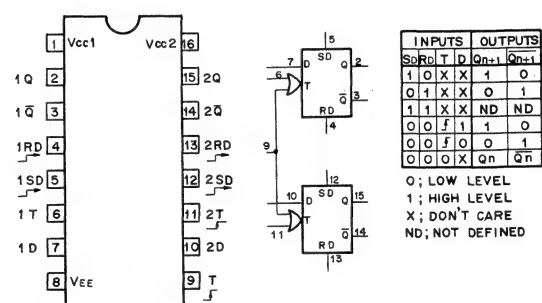
MC10125L (MOTOROLA)
HD10125 (HITACHI)
ECL ECL-TO-TTL TRANSLATOR

—TOP VIEW—



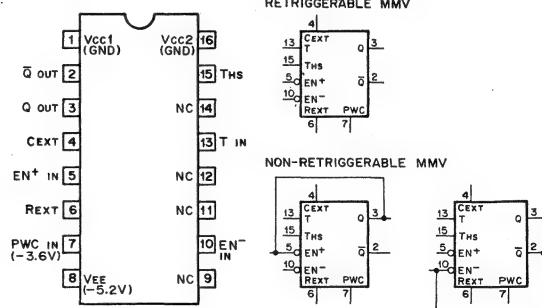
MC10131L (MOTOROLA)
HD10131 (HITACHI)
ECL D-TYPE FLIP FLOP

—TOP VIEW—



MC10198L (MOTOROLA)
RETRIGGERABLE MONOSTABLE MULTIVIBRATOR

—TOP VIEW—



T : CLOCK TRIGGER INPUT
THS : HIGH-SPEED CLOCK TRIGGER INPUT
EN⁺ : TRIGGER POSITIVE ENABLE
EN⁻ : TRIGGER NEGATIVE ENABLE
PWC : EXTERNAL PULSE WIDTH CONTROL

OUTPUT PULSE WIDTH: PWQ
PWQ = 1.19 · CEXT (REXT + 284)
WHERE
PWQ = SEC
CEXT = FARADS
REXT = OHMS
VEE = -5.2V
PWC = -3.6V

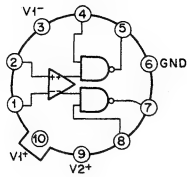
EN ⁺	EN ⁻	TRIG. SLOPE
0	0	1
0	1	1
1	0	1
1	1	DISABLE

0; LOW LEVEL
1; HIGH LEVEL

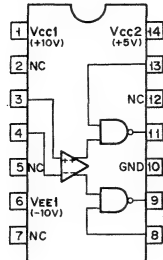
NOTE: SELECT REXT RANGING FROM ZERO TO 16K OHMS.
SELECT CEXT GREATER THAN 20PF.

NE527H (SIGNETICS)
 VOLTAGE COMPARATOR

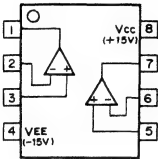
— BOTTOM VIEW —


NE527N (SIGNETICS)
 VOLTAGE COMPARATOR

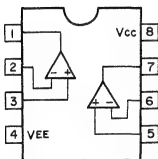
— TOP VIEW —


NJM2903D (JRC)
 OPERATIONAL AMPLIFIER

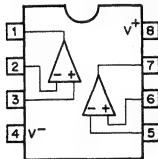
— TOP VIEW —


NJM4558D (JRC)
NJM4558DFA (JRC)
NJM4558DMD (JRC)
μPC4558C (NEC)
 OPERATIONAL AMPLIFIER

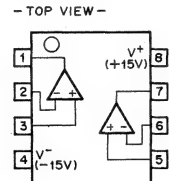
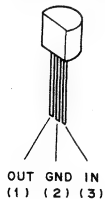
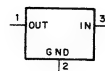
— TOP VIEW —


NJM4559D (JRC)
 OPERATIONAL AMPLIFIER

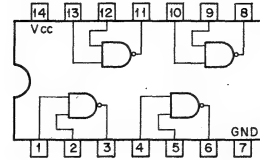
— TOP VIEW —


NJM4560D (JRC)
NJM4560DD (JRC)
NJM4560DN (JRC)
NJM4560DX (JRC)
 OPERATIONAL AMPLIFIER

— TOP VIEW —


NJM78L ? 7A (JRC)
 VOLTAGE REGULATOR

 2V NJM78L02A
 5V NJM78L05A
 6V NJM78L06A
 8V NJM78L08A
 9V NJM78L09A
 12V NJM78L12A
 15V NJM78L15A

SN7400N (TI)
M53200P (MITSUBISHI)
SN74S00N (TI)
SN74LS00N (TI)
HD74LS00P (HITACHI)
 TTL NAND GATE

— TOP VIEW —



$$A \text{ --- } B \text{ --- } Y = A \cdot B$$

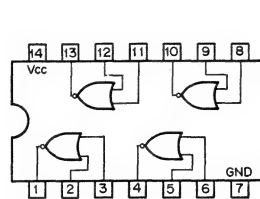
$$Y = A \cdot B = \overline{A + B}$$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

 0; LOW LEVEL
 1; HIGH LEVEL

SN7402N (TI)
M53202P (MITSUBISHI)
SN74S02N (TI)
SN74LS02N (TI)
 TTL 2-INPUT POSITIVE-NOR GATE

— TOP VIEW —



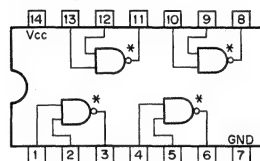
$$A \text{ --- } B \text{ --- } Y = \overline{A + B} = \overline{A} \cdot \overline{B}$$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

 0; LOW LEVEL
 1; HIGH LEVEL

SN7403N (TI)
SN74L03N (TI)
SN74S03N (TI)
SN74LS03N (TI)
 TTL 2-INPUT POSITIVE-NAND GATE WITH OPEN-COLLECTOR

— TOP VIEW —



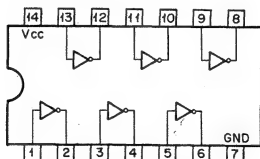
$$A \text{ --- } B \text{ --- } Y = \overline{A \cdot B} = \overline{A} + \overline{B}$$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

 0; LOW LEVEL
 1; HIGH LEVEL

SN7404N (TI)
M53204P (MITSUBISHI)
SN74L04N (TI)
SN74S04N (TI)
SN74LS04N (TI)
HD74LS04P (HITACHI)
 TTL INVERTER

— TOP VIEW —



$$A \text{ --- } Y = \overline{A}$$

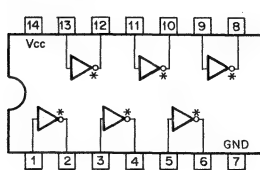
$$Y = \overline{A}$$

A	Y
0	1
1	0

 0; LOW LEVEL
 1; HIGH LEVEL

SN7405N (TI)
SN74LS05N (TI)
74LS05PC (FSC)
 TTL INVERTER WITH OPEN-COLLECTOR

— TOP VIEW —



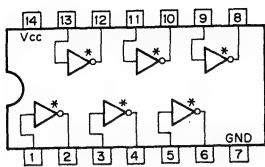
$$A \text{ --- } Y = \overline{A}$$

$$Y = \overline{A}$$

A	Y
0	1
1	0
1	0

 0; LOW LEVEL
 1; HIGH LEVEL
 0; OPEN COLLECTOR

SN7406N (TI)
HD7406P (HITACHI)
M53206P (MITSUBISHI)
TTL INVERTER BUFFER/DRIVER WITH OPEN-COLLECTOR
— TOP VIEW —



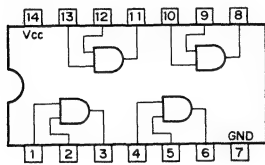
$$A \text{---} \text{---} Y = A \text{---} \text{---} Y$$

$$Y = \bar{A}$$

A	Y
0	1
1	0

0; LOW LEVEL
1; HIGH LEVEL
*; OPEN COLLECTOR

SN7408N (TI)
SN74S08N (TI)
SN74LS08N (TI)
HD74LS08P (HITACHI)
TTL 2-INPUT POSITIVE-AND GATE
— TOP VIEW —



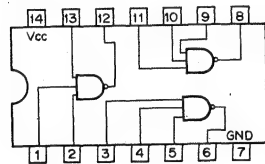
$$A \text{---} B \text{---} Y = A \text{---} B \text{---} Y$$

$$Y = A \cdot B = \overline{A+B}$$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

SN7410N (TI)
SN74LS10N (TI)
SN74S10N (TI)
SN74LS10N (TI)
HD74LS10P (HITACHI)
TTL 3-INPUT POSITIVE-NAND GATE
— TOP VIEW —



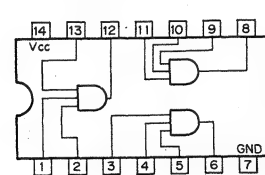
$$A \text{---} B \text{---} C \text{---} Y = A \text{---} B \text{---} C \text{---} Y$$

$$Y = \overline{A \cdot B \cdot C} = \overline{A+B+C}$$

A	B	C	Y
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

0; LOW LEVEL
1; HIGH LEVEL

SN74H11N (TI)
SN74S11N (TI)
SN74LS11N (TI)
TTL 3-INPUT POSITIVE-AND GATE
— TOP VIEW —



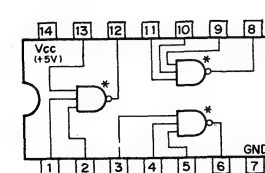
$$A \text{---} B \text{---} C \text{---} Y = A \text{---} B \text{---} C \text{---} Y$$

$$Y = A \cdot B \cdot C = \overline{A+B+C}$$

A	B	C	Y
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

0; LOW LEVEL
1; HIGH LEVEL

SN7412N (TI)
SN74LS12N (TI)
TTL 3-INPUT POSITIVE-NAND GATE WITH OPEN-COLLECTOR OUTPUT
— TOP VIEW —



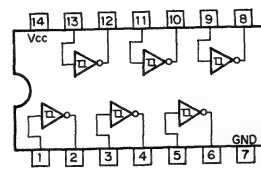
$$A \text{---} B \text{---} C \text{---} Y = A \text{---} B \text{---} C \text{---} Y$$

$$Y = \overline{A \cdot B \cdot C} = \overline{A+B+C}$$

A	B	C	Y
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

0; LOW LEVEL
1; HIGH LEVEL

SN7414N (TI)
SN74LS14N (TI)
TTL SCHMITT TRIGGER INVERTER
— TOP VIEW —



$$A \text{---} \text{---} Y = A \text{---} \text{---} Y$$

$$Y = \bar{A}$$

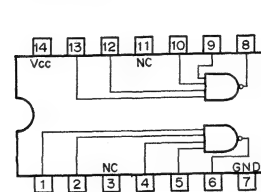
A	Y
0	1
1	0

0; LOW LEVEL
1; HIGH LEVEL

V IN \rightarrow V OUT

SN7414N \rightarrow 0.9 1.7V
SN74LS14N \rightarrow 0.8 1.6V

SN7420N (TI)
SN74S20N (TI)
SN74LS20N (TI)
TTL 4-INPUT POSITIVE-NAND GATE
— TOP VIEW —



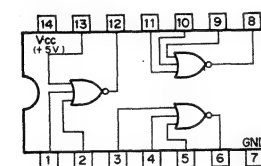
$$A \text{---} B \text{---} C \text{---} D \text{---} Y = A \text{---} B \text{---} C \text{---} D \text{---} Y$$

$$Y = \overline{A \cdot B \cdot C \cdot D} = \overline{A+B+C+D}$$

A	B	C	D	Y
0	0	0	0	1
0	0	0	1	1
0	0	1	0	1
0	0	1	1	1
0	1	0	0	1
0	1	0	1	1
0	1	1	0	1
0	1	1	1	0
1	0	0	0	1
1	0	0	1	1
1	0	1	0	1
1	0	1	1	1
1	1	0	0	1
1	1	0	1	1
1	1	1	0	1
1	1	1	1	0

0; LOW LEVEL
1; HIGH LEVEL

SN7427N (TI)
SN74LS27N (TI)
TTL 3-INPUT POSITIVE-NOR GATE
— TOP VIEW —



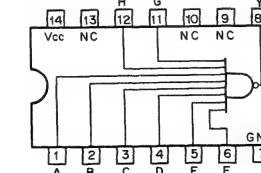
$$A \text{---} B \text{---} C \text{---} Y = A \text{---} B \text{---} C \text{---} Y$$

$$Y = \overline{A+B+C} = \overline{A} \cdot \overline{B} \cdot \overline{C}$$

A	B	C	Y
0	0	0	1
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	0

0; LOW LEVEL
1; HIGH LEVEL

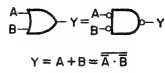
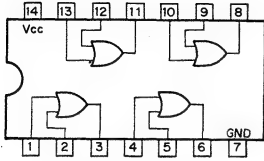
SN7430N (TI)
SN74S30N (TI)
SN74LS30N (TI)
HD74LS30P (HITACHI)
TTL 8-INPUT NAND GATE
— TOP VIEW —



$$Y = \overline{A \cdot B \cdot C \cdot D \cdot E \cdot F \cdot G \cdot H} = \overline{A+B+C+D+E+F+G+H}$$

SN 7432N (TI)
 SN 74S32N (TI)
 SN 74LS32N (TI)
 HD 74LS32P (HITACHI)
 MB74LS32 (FUJITSU)
 M74LS32P (MITSUBISHI)

TTL 2-INPUT POSITIVE-OR GATE
 - TOP VIEW -



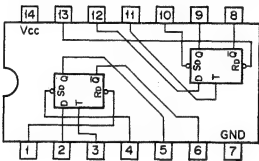
$$Y = A + B = \overline{A \cdot B}$$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0; LOW LEVEL
 1; HIGH LEVEL

SN7474N (TI)
 M53274P (MITSUBISHI)
 SN74H74N (TI)
 SN74L74N (TI)
 SN74S74N (TI)
 SN74LS74AN (TI)
 HD74LS74P (HITACHI)

TTL D-TYPE FLIP FLOP WITH DIRECT SET/RESET
 - TOP VIEW -

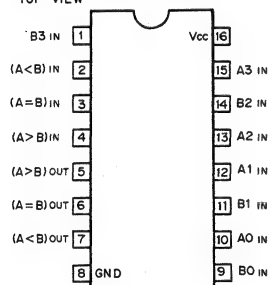


INPUTS		OUTPUTS	
SD	Rd	Qn	Qn+1
0	1	X	1
1	0	X	0
0	0	X	1*
1	1	1	0
1	1	0	1
1	1	0	Qn

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE
 1*; NONSTABLE

SN7485N (TI)
 SN74S85N (TI)
 SN74LS85N (TI)

TTL 4-BIT MAGNITUDE COMPARATOR
 - TOP VIEW -

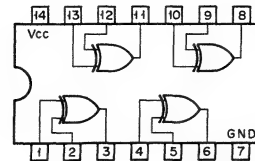


10		12		13		15	
AO		A1		A2		A3	
4	A > B IN				A > B OUT		5
3	A = B IN				A = B OUT		6
2	A < B IN				A < B OUT		7
BO		B1		B2		B3	
9		11		14		1	

0; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

SN7486N (TI)
 SN74S86N (TI)
 SN74LS86N (TI)
 HD74LS86P (HITACHI)

TTL EXCLUSIVE OR GATE
 - TOP VIEW -



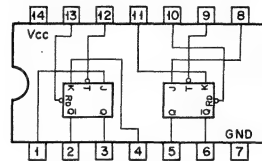
$$Y = A \oplus B = A \cdot \overline{B} + \overline{A} \cdot B$$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
 1; HIGH LEVEL

SN74LS107AN (TI)
 HD74LS107P (HITACHI)

TTL J-K FLIP FLOP WITH DIRECT RESET
 - TOP VIEW -

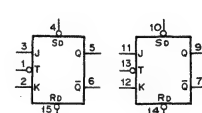
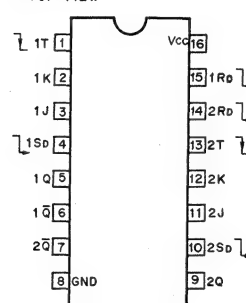


INPUTS				OUT	
Rd	T	J	K	Qn+1	Qn
0	X	X	X	0	0
1	1	0	0	Qn	Qn
1	1	0	1	0	Qn
1	1	1	0	1	Qn
1	1	1	1	1	Qn
1	1	X	X	Qn	Qn

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE

SN74S112N (TI)
 SN74LS112AN (TI)

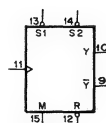
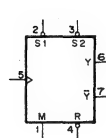
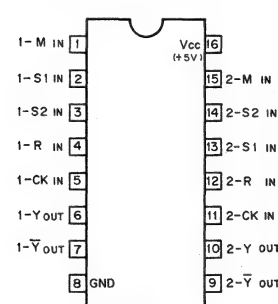
TTL J-K FLIP FLOP WITH DIRECT SET/RESET
 - TOP VIEW -



INPUTS				OUTPUTS	
SD	Rd	J	K	Qn+1	Qn
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1*	1*
1	1	0	0	Qn	Qn
1	1	0	1	0	Qn
1	1	1	0	1	Qn
1	1	1	1	Qn	Qn

0; LOW LEVEL X; DON'T CARE
 1; HIGH LEVEL *; NONSTABLE

SN74120N (TI)
 TTL PULSE SYNCHRONIZER/DRIVER
 - TOP VIEW -



INPUT M	OUTPUT MODE
0	TRAIN OF PULSES
1	SINGLE PULSE

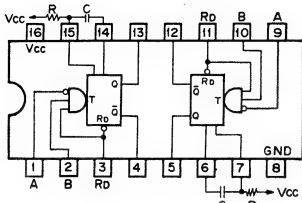
INPUTS		FUNCTION	
R	S1 S2		
X	0 X	PASS OUTPUT PULSES	
X	X 0	PASS OUTPUT PULSES	
0	1 1	INHIBIT OUTPUT PULSES	
1	1 1	START OUTPUT PULSES	
1	1 1	STOP OUTPUT PULSES	
1	1 1	CONTINUE	

S1, S2; START COMMAND INPUTS
 R; STOP COMMAND INPUT
 M; MODE CONTROL INPUT
 Y, Y; SYNCHRONIZED PULSE OUTPUT

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE

SN74123N (TI)
 SN74L123N (TI)
 SN74LS123N (TI)
 SN74LS123NS(TI)
 HD74LS123P (HITACHI)
 TTL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR WITH DIRECT RESET

—TOP VIEW—



INPUTS		OUTPUTS	
RD	A	Q	Q
0	X	X	0
1	0	1	1
1	1	0	1
1	1	1	1

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE

OUTPUT PULSE WIDTH

$$T_w = 0.28 \left(1 + \frac{700}{R} \right) CR$$

$$T_w = 0.33 \left(1 + \frac{700}{R} \right) CR$$

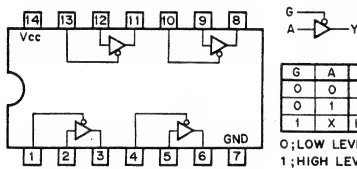
$$T_w = 0.25 \left(1 + \frac{700}{R} \right) CR$$

$$T_w = 0.29 \left(1 + \frac{700}{R} \right) CR$$

LS123; $T_w = 0.45CR$

SN74125N
 SN74LS125AN
 TTL BUS BUFFER GATES WITH 3-STATE OUTPUT

—TOP VIEW—

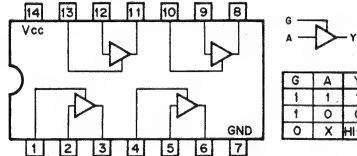


G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE
 HI-Z; HIGH IMPEDANCE

SN74LS126AN (TI)
 TTL BUS BUFFER GATE WITH 3-STATE OUTPUT

—TOP VIEW—

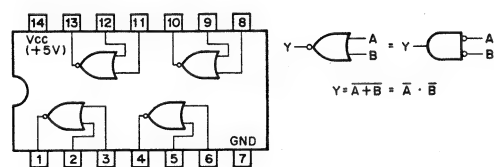


G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE
 HI-Z; HIGH IMPEDANCE

SN74128N (TI)
 TTL 50-Ω LINE DRIVER

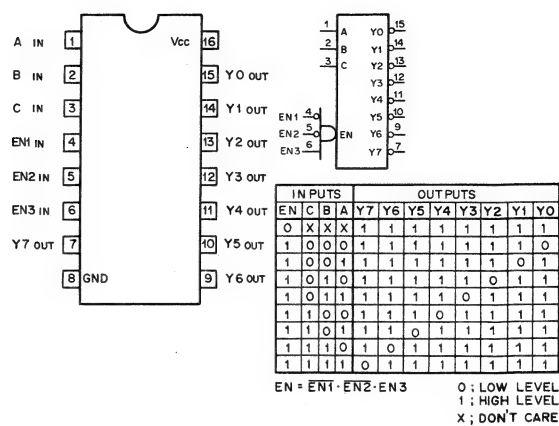
—TOP VIEW—



$$Y = A + B = \overline{A} \cdot \overline{B}$$

SN74S138N (TI)
 SN74LS138N (TI)
 HD74LS138P (HITACHI)
 MB74LS138 (FUJITSU)
 M74LS138P (MITSUBISHI)
 TTL 3-TO-8-LINE DECODER/DEMULPLEXER

—TOP VIEW—



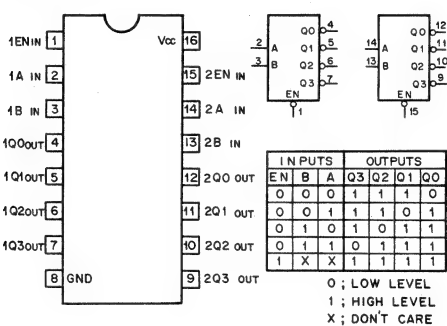
INPUTS			OUTPUTS							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1
0	X	X	X	1	1	1	1	1	1	1
1	0	0	0	1	1	1	1	1	1	1
1	0	0	1	1	1	1	1	1	1	0
1	0	1	0	1	1	1	1	1	0	1
1	0	1	1	1	1	1	1	0	1	1
1	1	0	0	1	1	1	0	1	1	1
1	1	0	1	1	1	0	1	1	1	1
1	1	1	0	1	1	1	1	1	1	1
1	1	1	1	0	1	1	1	1	1	1

EN = EN1-EN2-EN3

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE

SN74S139N (TI)
 SN74LS139N (TI)
 TTL 2-TO-4-LINE DECODER/DEMULPLEXER

—TOP VIEW—

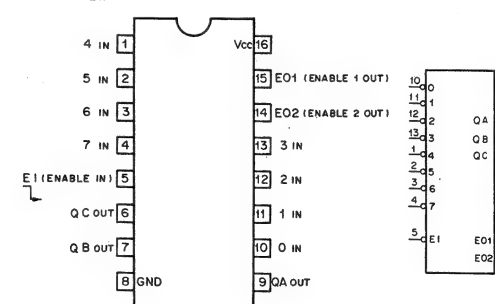


INPUTS			OUTPUTS			
EN	B	A	Q3	Q2	Q1	Q0
0	0	0	1	1	1	0
0	0	1	1	1	0	1
0	1	0	1	0	1	1
0	1	1	0	1	1	1
1	X	X	1	1	1	1

0; LOW LEVEL
 1; HIGH LEVEL
 X; DON'T CARE

SN74148N (TI)
 SN74LS148N (TI)
 TTL 8-TO-3-LINE PRIORITY ENCODER

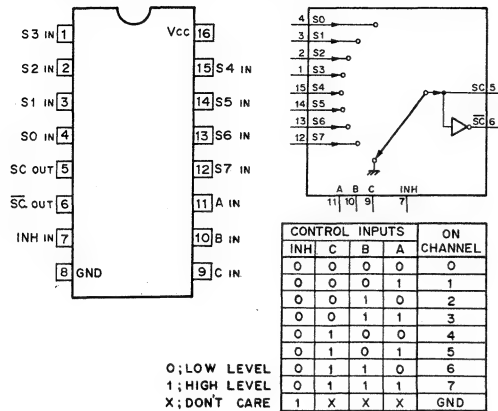
—TOP VIEW—



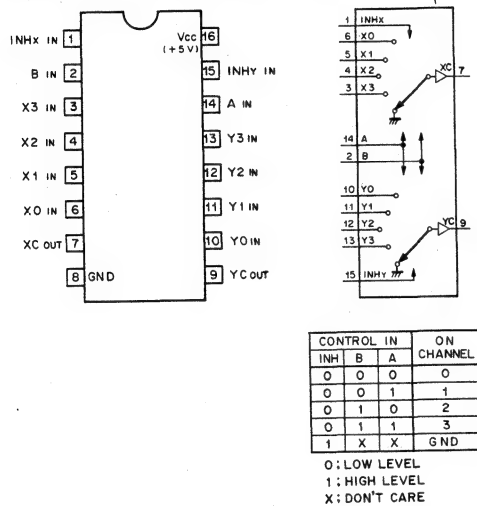
INPUTS								OUTPUTS				
E1	7	6	5	4	3	2	1	0	QC	QB	QA	E01
1	X	X	X	X	X	X	X	X	1	1	1	1
0	1	1	1	1	1	1	1	1	1	1	1	0
0	1	1	1	1	1	1	0	1	1	1	1	0
0	1	1	1	1	1	0	1	1	1	1	0	1
0	1	1	1	1	0	1	1	1	1	0	1	1
0	1	1	1	0	1	1	1	1	0	1	1	1
0	1	1	0	1	1	1	1	0	1	1	1	1
0	1	0	1	1	1	1	1	0	0	1	1	1
0	0	X	X	X	X	X	X	X	0	0	0	1

0; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

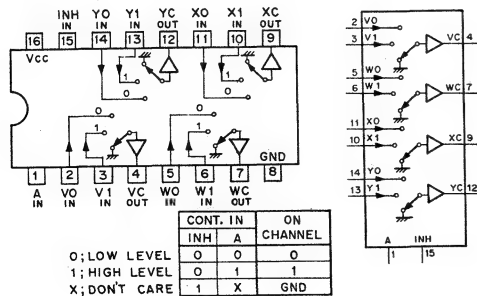
SN74151AN (TI)
 SN74S151N (TI)
 SN74LS151N (TI)
 TTL 8-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
 — TOP VIEW —



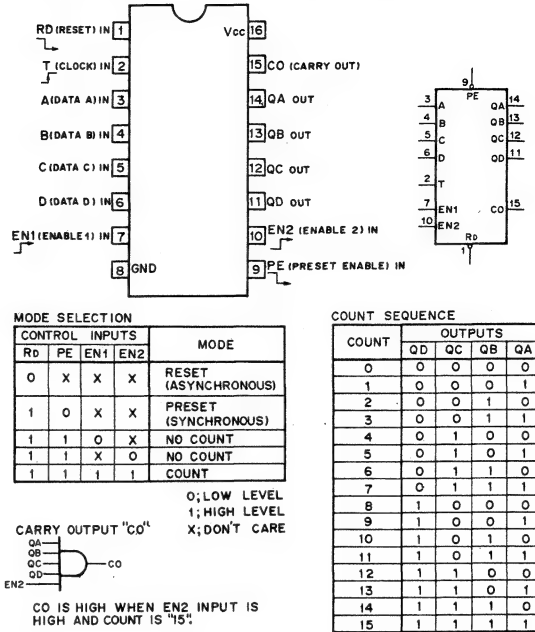
SN74153N (TI)
 SN74LS153N (TI)
 SN74S153N (TI)
 HD74LS153P (HITACHI)
 M74LS153P (MITSUBISHI)
 MB74LS153 (FUJITSU)
 TTL 4-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
 — TOP VIEW —



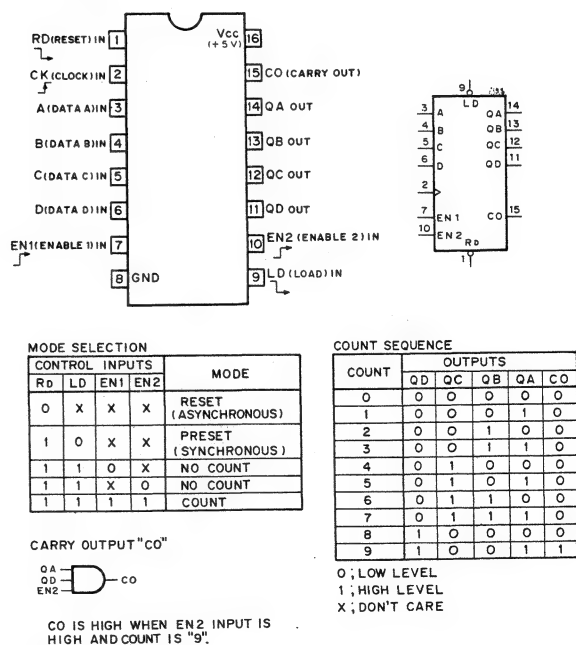
SN74157N (TI)
 SN74LS157N (TI)
 SN74S157N (TI)
 SN74LS157N (TI)
 HD74LS157P (HITACHI)
 MB74LS157 (FUJITSU)
 M74LS157P (MITSUBISHI)
 TTL 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
 — TOP VIEW —



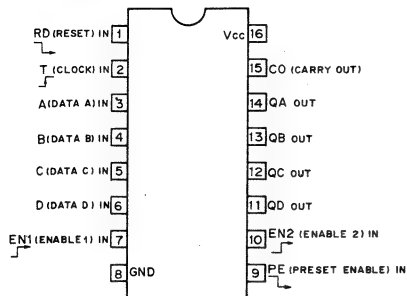
SN74161N (TI)
 SN74LS161AN (TI)
 HD74LS161P (HITACHI)
 TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER
 — TOP VIEW —



SN74162N (TI)
 SN74LS162AN (TI)
 SN74S162N (TI)
 TTL PRESETTABLE SYNCHRONOUS 4-BIT DECADE COUNTER
 — TOP VIEW —



SN74163N (TI)
 SN74S163N (TI)
 SN74LS163AN (TI)
 HD74LS163P (HITACHI)
 TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER
 — TOP VIEW —

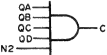


MODE SELECTION

CONTROL INPUTS				MODE
Rd	PE	EN1	EN2	
0	X	X	X	RESET (SYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

0: LOW LEVEL
 1: HIGH LEVEL
 X: DON'T CARE

CARRY OUTPUT "CO"

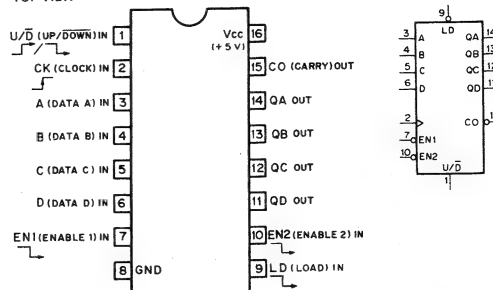


CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

COUNT SEQUENCE

COUNT	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

SN74S169N (TI)
 TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY UP/DOWN COUNTER
 — TOP VIEW —



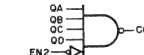
MODE SELECTION

INPUTS				MODE
LD	EN1	EN2	U/D	
0	X	X	X	PRESET
X	1	X	X	NO COUNT
X	X	1	X	NO COUNT
1	0	0	1	UP COUNT
1	0	0	0	DOWN COUNT

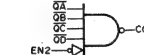
0: LOW LEVEL
 1: HIGH LEVEL
 X: DON'T CARE

CARRY OUTPUTS "CO"

AT U/D = 1



AT U/D = 0

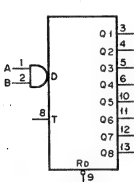
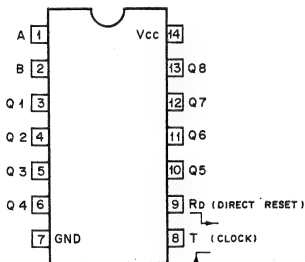





COUNT SEQUENCE

COUNT	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

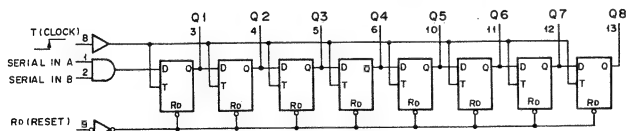
UP COUNT
 DOWN COUNT

SN74164N (TI)
 SN74L164N (TI)
 SN74LS164N (TI)
 HD74LS164P (HITACHI)
 TTL 8-BIT PARALLEL-OUT SERIAL SHIFT REGISTER
 — TOP VIEW —

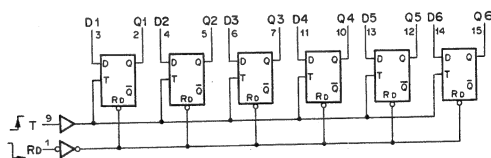
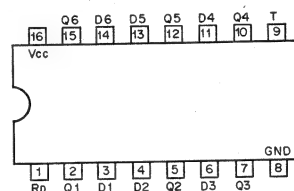


INPUTS				OUTPUTS			
Rd	T	A	B	Q1	Q2	---	Q8
0	X	X	X	0	0	0	0
1	0	X	X	Q1o	Q2o	---	Q8o
1		1	1	1	Q1n	---	Q7n
1		0	X	0	Q1n	---	Q7n
1		X	0	0	Q1n	---	Q7n



0: LOW LEVEL
 1: HIGH LEVEL
 X: DON'T CARE



SN74174N (TI)
 SN74S174N (TI)
 SN74LS174N (TI)
 HD74LS174P (HITACHI)
 MB74LS174 (FUJITSU)
 M74LS174P (MITSUBISHI)
 TTL D-TYPE FLIP-FLOP WITH DIRECT RESET
 — TOP VIEW —



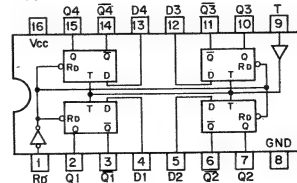
EACH FLIP-FLOP



INPUTS			OUT
Rd	T	D	Q
0	X	X	0
1		0	0
1		1	1
1	0	X	Qo

0;LOW LEVEL
 1;HIGH LEVEL
 X;DON'T CARE

0: LOW LEVEL
 1: HIGH LEVEL
 X: DON'T CARE

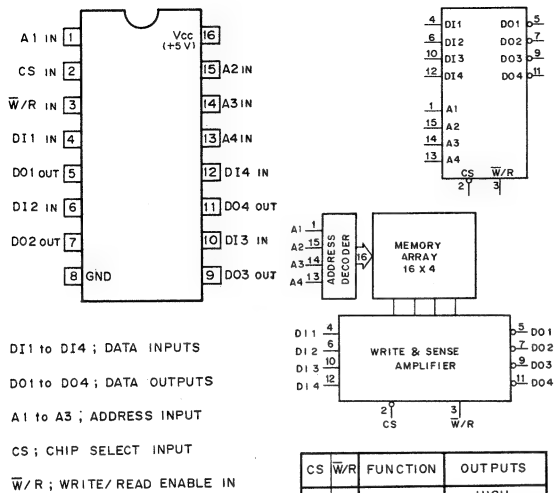
SN74175N (TI)
 SN74S175N (TI)
 SN74LS175N (TI)
 HD74LS175P (HITACHI)
 TTL D-TYPE FLIP-FLOP WITH CLEAR
 — TOP VIEW —



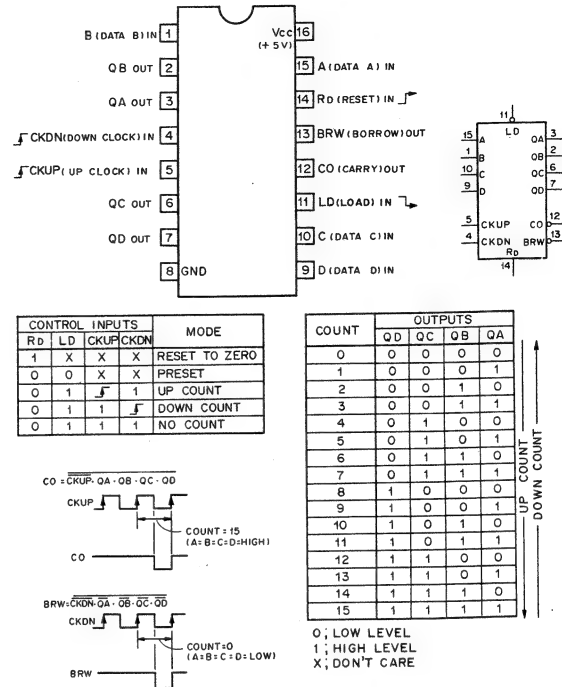
R _D	T	D	Q	\bar{Q}
0	X	X	0	1
1		1	1	0
1		0	0	1
1	0	X	Q ₀	\bar{Q}_0

0: LOW LEVEL
 1: HIGH LEVEL
 X: DON'T CARE

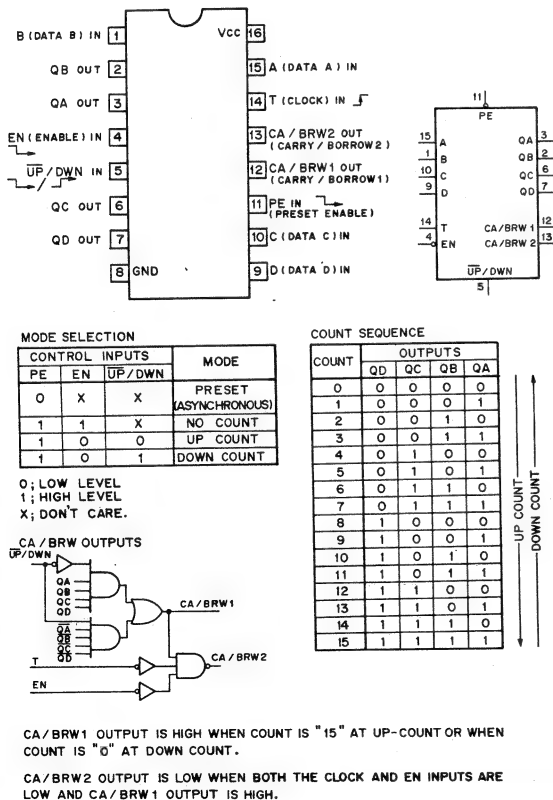
SN74S189AN (TI)
SN74S189N (TI)
TTL 64-BIT RAM WITH 3-STATE OUTPUT
— TOP VIEW —



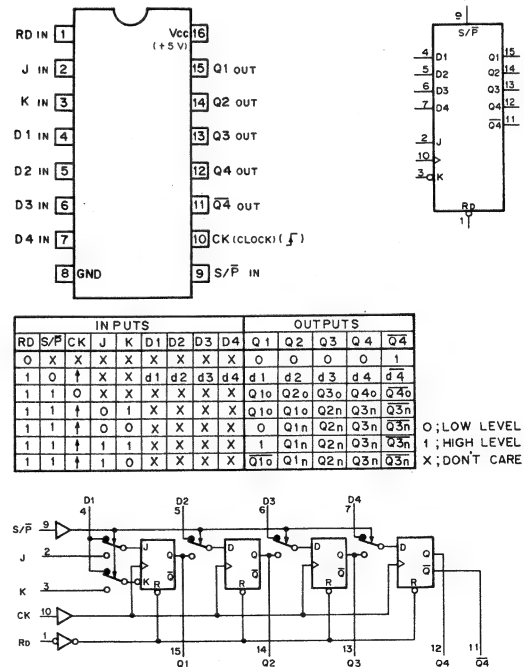
SN74193N (TI)
SN74LS193N (TI)
SN74LS193N (TI)
MB74LS193 (FUJITSU)
TTL PRESETTABLE SYNCHRONOUS 4-BIT UP/DOWN COUNTER
— TOP VIEW —



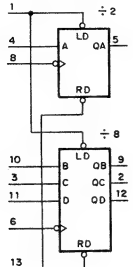
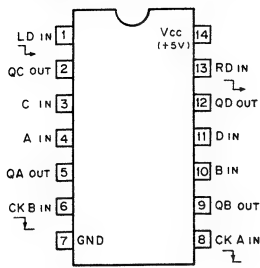
SN74191N (TI)
SN74LS191N (TI)
TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY UP/DOWN COUNTER
— TOP VIEW —



SN74LS195AN (TI)
SN74S195N (TI)
TTL 4-BIT PARALLEL-ACCESS SHIFT REGISTER
— TOP VIEW —



SN74LS197N (TI)

TTL PRESETTABLE DIVIDE-BY-2 AND DIVIDE-BY-8 (4-BIT BINARY) COUNTER
— TOP VIEW —

COUNT SEQUENCE

÷2 SECTION

COUNT	RD	LD	QA
0	1	1	0
1	1	1	1
X	1	0	SET TO A
0	0	X	0

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

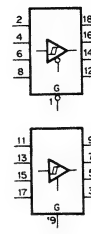
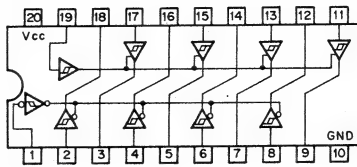
÷8 SECTION

COUNT	RD	LD	QD	QC	QB
0	1	1	0	0	0
1	1	1	0	0	1
2	1	1	0	1	0
3	1	1	0	1	1
4	1	1	1	0	0
5	1	1	1	0	1
6	1	1	1	1	0
7	1	1	1	1	1
X	1	0	D	C	B
0	0	X	0	0	0

SN74LS241N (TI)

SN74S241N (TI)

HD74LS241P (HITACHI)

TTL 3-STATE SCHMITT TRIGGER BUFFER/LINE DRIVER
— TOP VIEW —

G	A	Y
0	0	0
0	1	1
1	0	HI-Z
1	1	HI-Z

HI-Z; HIGH IMPEDANCE

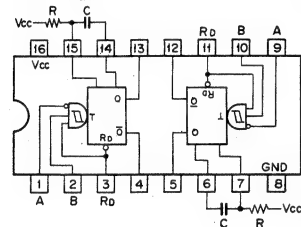
G	A	Y
0	0	HI-Z
0	1	HI-Z
1	0	0
1	1	1







HI-Z; HIGH IMPEDANCE

SN74221N (TI)

SN74LS221N (TI)

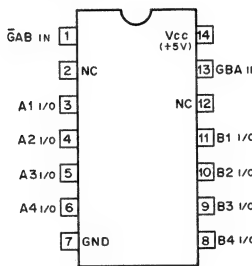
HD74LS221P (HITACHI)

TTL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT
— TOP VIEW —

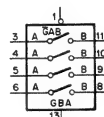
INPUTS			OUTPUTS	
R ₀	A	B	Q	Q̄
0	X	X	0	1
X	1	X	0	1
X	X	0	0	1
1	0	↑		
1	↓	1		
↑	0	1		

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
OUTPUT PULSE WIDTH = 0.7CR

SN74LS243N (TI)

TTL BUS TRANSCEIVERS WITH 3-STATE OUTPUT
— TOP VIEW —

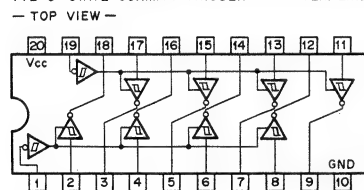
GAB	GBA	OPERATION
0	0	A to B
0	1	DON'T USE
1	0	HI-Z
1	1	B to A

0; LOW LEVEL
1; HIGH LEVEL
HI-Z; HIGH IMPEDANCE

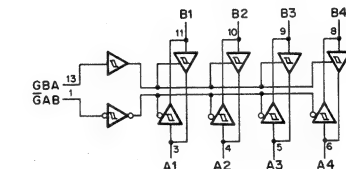
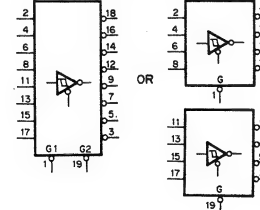
SN74S240N (TI)

SN74LS240N (TI)

HD74LS240P (HITACHI)

TTL 3-STATE SCHMITT TRIGGER INVERTER/LINE DRIVER
— TOP VIEW —

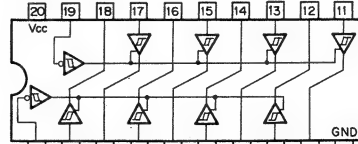
G	A	Y
0	0	1
0	1	0
1	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

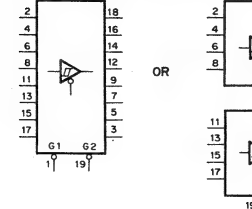
SN74LS244N (TI)

HD74LS244P (HITACHI)

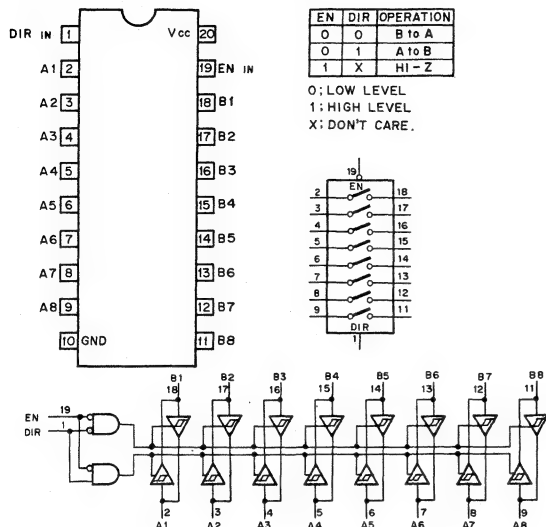
M74LS244P (MITSUBISHI)

TTL 3-STATE SCHMITT TRIGGER BUFFER/DRIVER
— TOP VIEW —

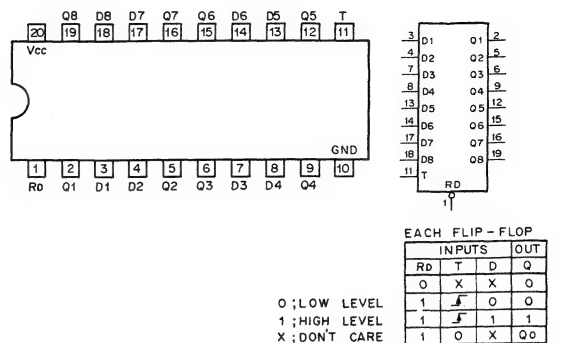
G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE

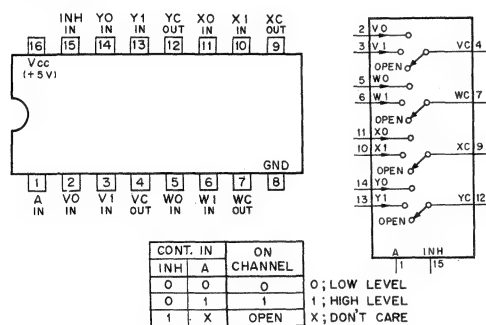
SN74LS245N (TI)
TTL BILATERAL SCHMITT TRIGGER BUS TRANSCEIVERS WITH 3-STATE OUTPUT
— TOP VIEW —



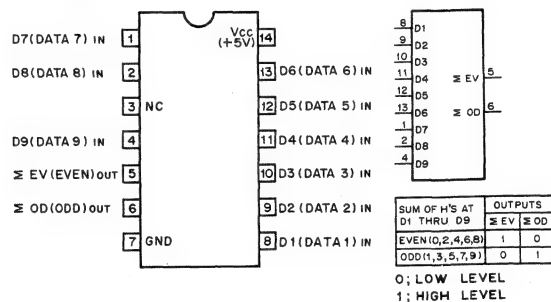
SN74273N (TI)
SN74LS273N (TI)
M74LS273P (MITSUBISHI)
TTL D-TYPE FLIP-FLOP WITH DIRECT RESET
— TOP VIEW —



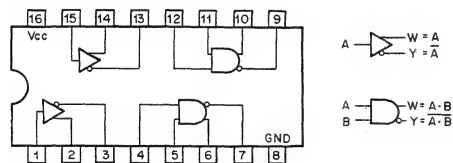
SN74LS257AN (TI)
TTL 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
— TOP VIEW —



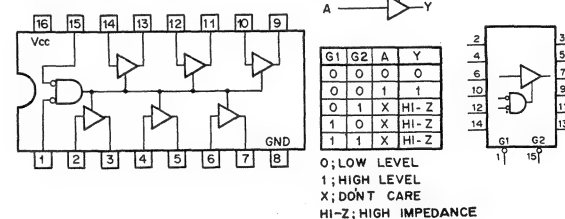
SN74LS280N (TI)
TTL 9-BIT ODD/EVEN PARITY GENERATOR/CHECKER
— TOP VIEW —



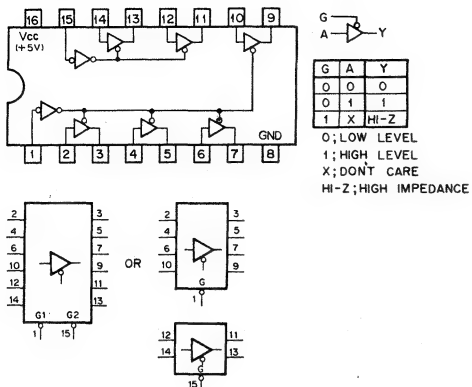
SN74265N (TI)
TTL COMPLEMENTARY-OUTPUT ELEMENT
— TOP VIEW —



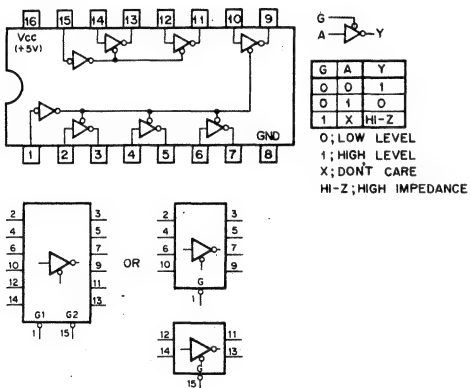
SN74LS365AN (TI)
SN74365AN (TI)
TTL 3-STATE BUS DRIVER
— TOP VIEW —



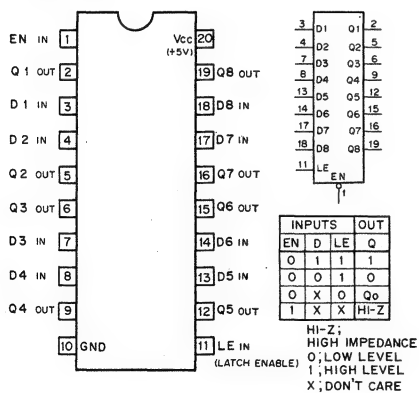
SN74367AN (TI)
SN74LS367AN (TI)
TTL BUS DRIVER WITH 3-STATE OUTPUTS
— TOP VIEW —



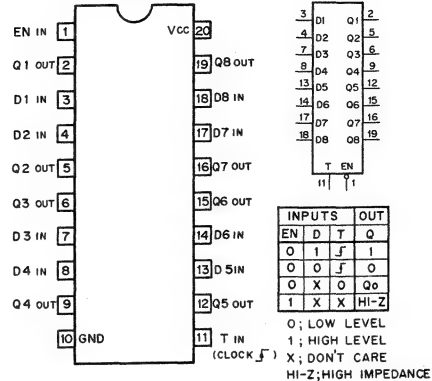
SN74368AN (TI)
SN74LS368AN (TI)
TTL BUS INVERTER WITH 3-STATE OUTPUTS
— TOP VIEW —



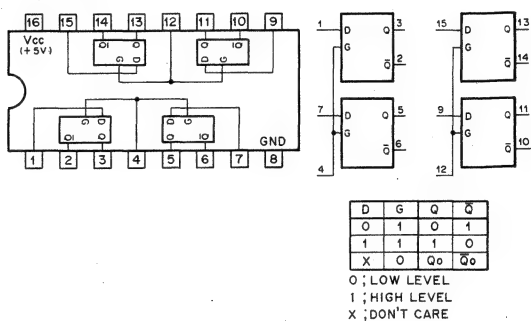
SN74LS373N (TI)
SN74S373N (TI)
TTL 3-STATE OUTPUTS OCTAL LATCHES
— TOP VIEW —



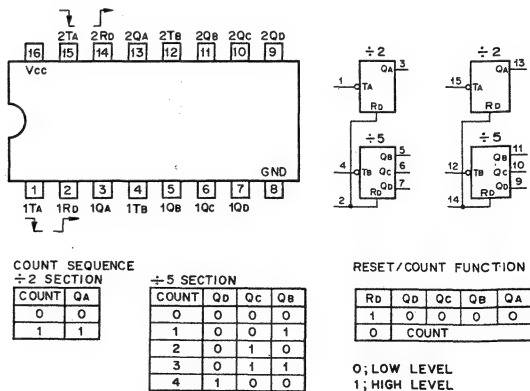
SN74LS374N (TI)
SN74S374N (TI)
TTL 3-STATE OUTPUTS OCTAL D-TYPE FLIP-FLOP
— TOP VIEW —



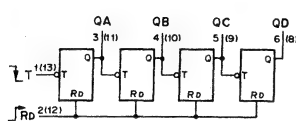
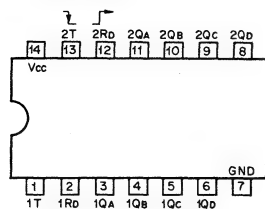
SN74LS375N (TI)
TTL BISTABLE LATCH
— TOP VIEW —



SN74390N (TI)
SN74LS390N (TI)
TTL DIVIDE-BY-2 AND DIVIDE-BY-5 COUNTER
— TOP VIEW —



SN74393N (TI)
SN74LS393N (TI)
TTL 4-BIT BINARY COUNTER
—TOP VIEW—



COUNT SEQUENCE

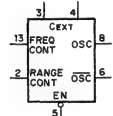
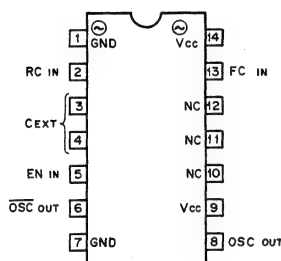
COUNT	Qd	Qc	Qb	Qa
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

RESET/COUNT FUNCTION

Rd	Qb	Qc	Qd	Qa
1	0	0	0	0
0	COUNT			

0; LOW LEVEL
1; HIGH LEVEL

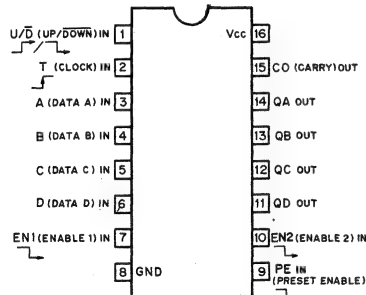
SN74LS624N (TI)
TTL VOLTAGE CONTROLLED OSCILLATOR
—TOP VIEW—



EN	OSC	OSC
0	ENABLE	ENABLE
1	LOW	HIGH

0; LOW LEVEL
1; HIGH LEVEL

SN74LS669N (TI)
TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY UP/DOWN COUNTER
—TOP VIEW—



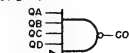
MODE SELECTION

INPUTS				MODE
PE	EN1	EN2	U/D	
0	X	X	X	PRESET
X	1	X	X	NO COUNT
X	X	1	X	NO COUNT
1	0	0	1	UP COUNT
1	0	0	0	DOWN COUNT

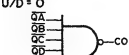
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

CARRY OUTPUTS "CO"

AT U/D = 1



AT U/D = 0

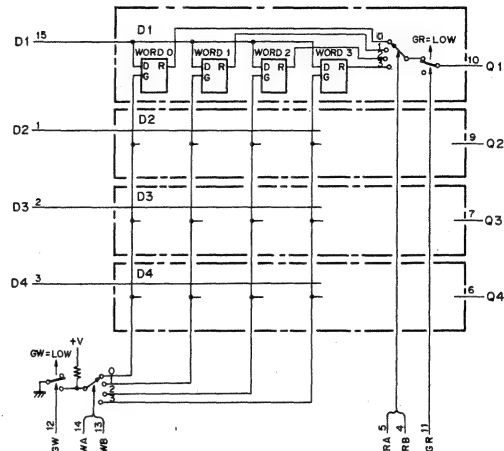
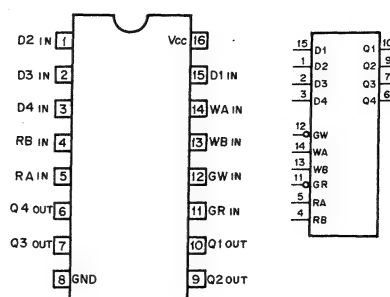


COUNT SEQUENCE

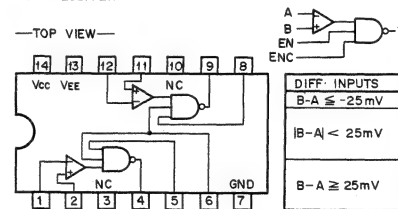
COUNT	Qd	Qc	Qb	Qa
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

UP COUNT
DOWN COUNT

SN74LS670N(TI)
TTL 4-BY-4 REGISTER FILES WITH 3-STATE OUTPUT
—TOP VIEW—



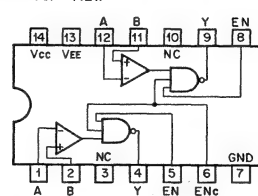
SN75107AN (TI)
SN75107BN (TI)
HD75107A (HITACHI)
HD75107AP (HITACHI)
LINE RECEIVER
—TOP VIEW—



DIFF. INPUTS	EN	ENC	Y
B-A ≤ -25mV	X	X	1
B-A < 25mV	X	0	1
	0	X	1
	1	1	N/D
B-A ≥ 25mV	X	0	1
	0	X	1
	1	1	0

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
N/D; NOT DEFINED

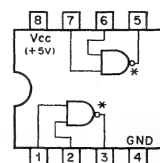
SN75207BN (TI)
BIPOLAR LINE RECEIVER (TTL COMPATIBLE)
—TOP VIEW—



INPUTS	EN	ENC	Y
B-A	X	X	1
B-A ≥ 10mV	0	X	1
	1	1	0
B-A < 10mV	X	0	1
	0	X	1
B-A ≤ -10mV	X	X	1

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

SN75452BP (TI)
HD75452P (HITACHI)
TTL PERIPHERAL POSITIVE-NAND DRIVER
WITH OPEN-COLLECTOR
—TOP VIEW—



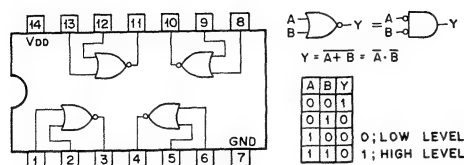
$$A \cdot B = Y \quad A \cdot B = Y$$

$$Y = A \cdot B = \overline{A} + \overline{B}$$

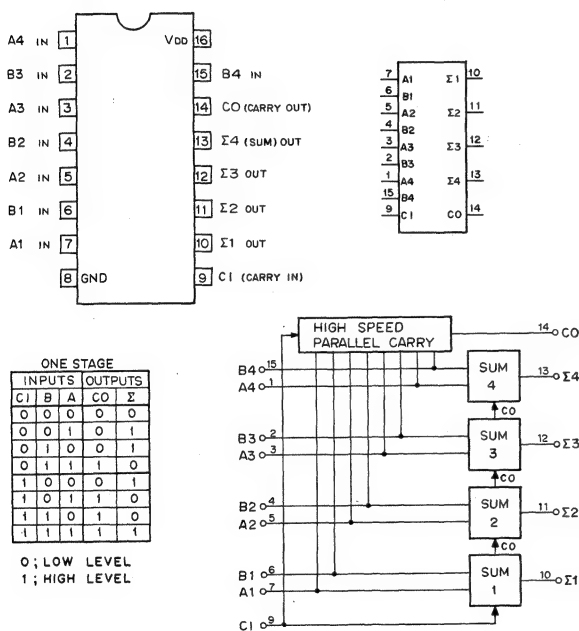
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

TC4001BP (TOSHIBA)
 TC4001UBP (TOSHIBA)
 μ PD4001BC (NEC)
 MB84001B (FUJITSU)
 MSM4001 (OKI)
 HD14001BP (HITACHI)
 MC14001BCP (MOTOROLA)
 MC14001UBCP (MOTOROLA)
 C-MOS 2-INPUT NOR GATE
 - TOP VIEW -



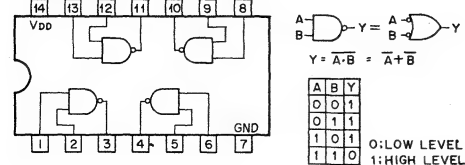
TC4008BP (TOSHIBA)
 MC14008BCP (MOTOROLA)
 C-MOS 4-BIT FULL ADDER
 - TOP VIEW -



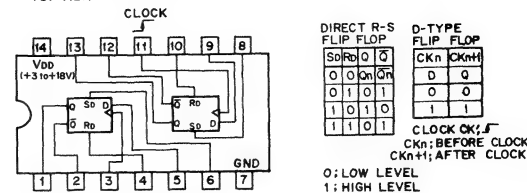
ONE STAGE

INPUTS			OUTPUTS	
C	B	A	CO	Σ
0	0	0	0	0
0	0	1	0	1
0	1	0	0	1
0	1	1	1	0
1	0	0	0	1
1	0	1	1	0
1	1	0	1	0
1	1	1	1	1

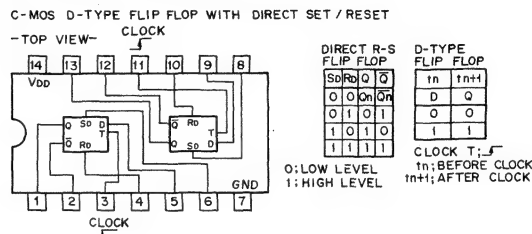
TC4011BP (TOSHIBA)
 TC4011UBP (TOSHIBA)
 μ PD4011BC (NEC)
 MSM4011RS (OKI)
 MB84011B (FUJITSU)
 HD14011BP (HITACHI)
 MC14011BCP (MOTOROLA)
 MC14011UBCP (MOTOROLA)
 C-MOS 2-INPUT NAND GATE
 - TOP VIEW -



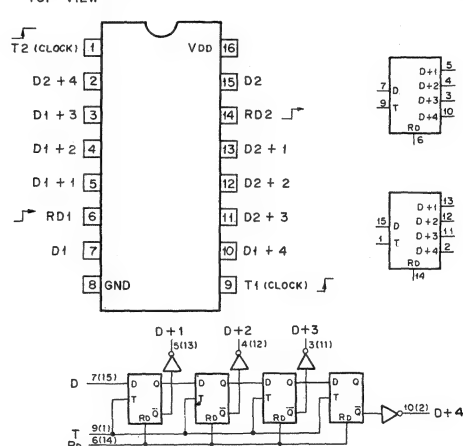
TC4013BP (TOSHIBA)
 TC504013BP (TOSHIBA)
 C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
 - TOP VIEW -



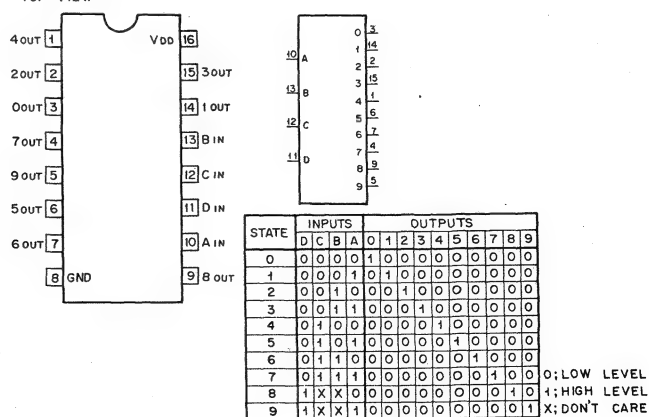
MB84013B (FUJITSU)
 MB84013M (FUJITSU)
 μ PD4013BC (NEC)
 μ PD4013C (NEC)
 HD14013BP (HITACHI)
 MC14013BCP (MOTOROLA)
 C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
 - TOP VIEW -



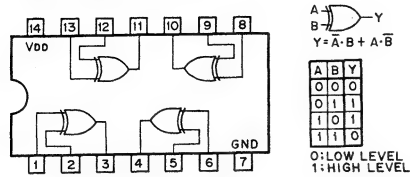
TC4015BP (TOSHIBA)
 μ PD4015C (NEC)
 μ PD4015BC (NEC)
 MC14015BCP (MOTOROLA)
 C-MOS DUAL 4-STAGE STATIC SHIFT REGISTER WITH DIRECT RESET
 - TOP VIEW -



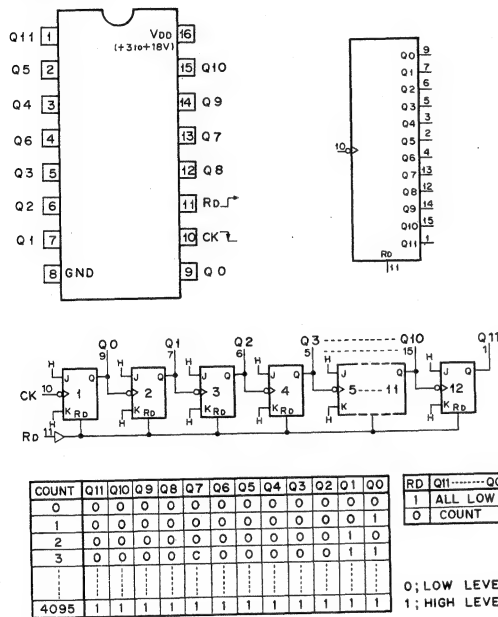
TC4028BP (TOSHIBA)
 μ PD4028C (NEC)
 C-MOS BCD TO DECIMAL DECODER
 - TOP VIEW -



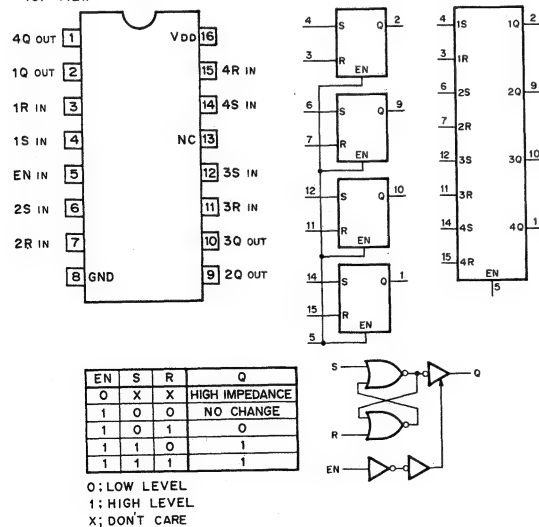
TC4030BP (TOSHIBA)
 μ PD4030BC (NEC)
 μ PD4030C (NEC)
 MC14507CP (MOTOROLA)
 C-MOS EXCLUSIVE OR GATE
 — TOP VIEW —



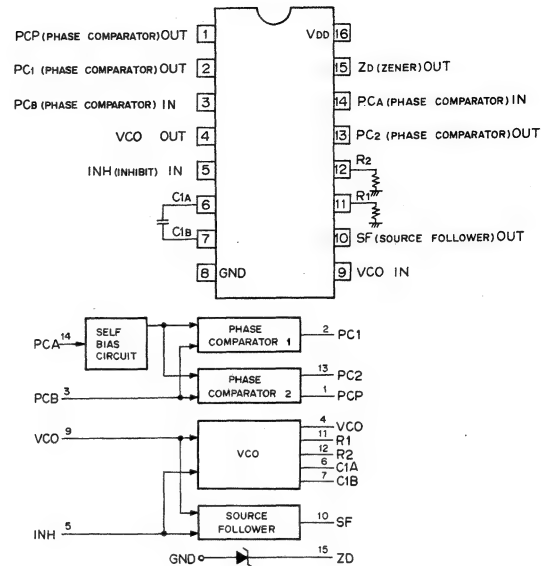
TC4040BP (TOSHIBA)
 HD14040BP (HITACHI)
 MB84040B (FUJITSU)
 μ PD4040C (NEC)
 C-MOS 12-STAGE RIPPLE CARRY BINARY COUNTER/DRIVER
 — TOP VIEW —



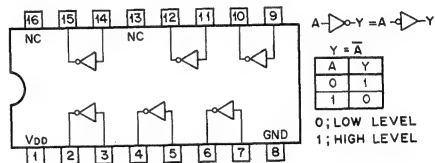
TC4043BP (TOSHIBA)
 MC14043BCP (MOTOROLA)
 C-MOS 3-STATE OUTPUT NOR R-S LATCH
 — TOP VIEW —



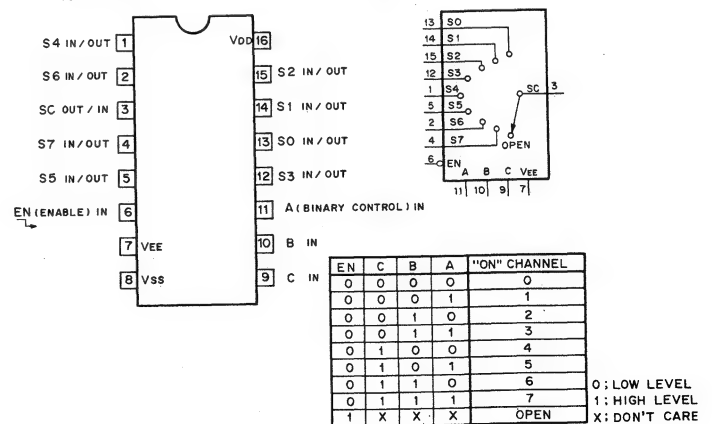
TC4046BP (TOSHIBA)
 HD14046BP (HITACHI)
 MC14046BCP (MOTOROLA)
 C-MOS PHASE LOCKED LOOP
 — TOP VIEW —



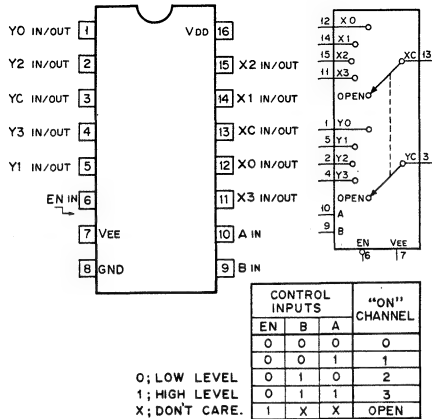
TC4049BP (TOSHIBA)
 μ PD4049C (NEC)
 MB84049B (FUJITSU)
 MB84049UB (FUJITSU)
 MC14049UBCP (MOTOROLA)
 C-MOS INVERTING TYPE BUFFER/CONVERTER
 — TOP VIEW —



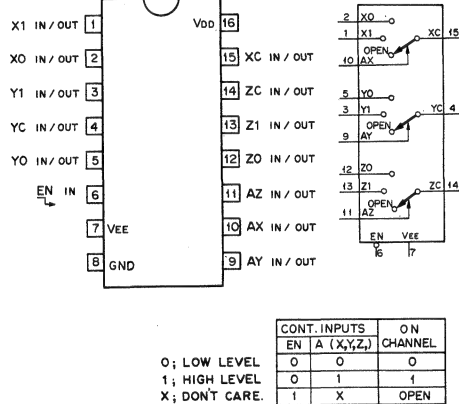
TC4051BP (TOSHIBA)
 μ PD4051BC (NEC)
 HD14051BP (HITACHI)
 MC14051BCP (MOTOROLA)
 C-MOS 8-CHANNEL MULTIPLEXER/DEMULPLEXER
 — TOP VIEW —



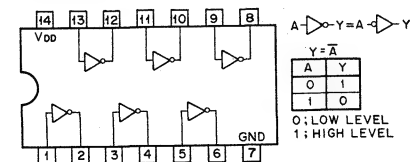
TC4052BP (TOSHIBA)
 MB84052B (FUJITSU)
 HD14052BP (HITACHI)
 MC14052BCP (MOTOROLA)
 C-MOS 4-CHANNEL MULTIPLEXER / DEMULTIPLEXER
 — TOP VIEW —



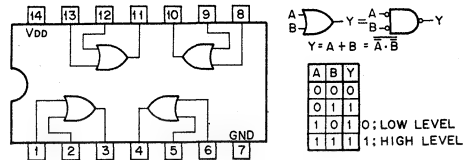
TC4053BP (TOSHIBA)
 MSM4053 (OKI)
 MB84053B (FUJITSU)
 HD14053BP (HITACHI)
 μPD4053BC (NEC)
 MC14053BCP (MOTOROLA)
 C-MOS 2-CHANNEL MULTIPLEXER / DEMULTIPLEXER
 — TOP VIEW —



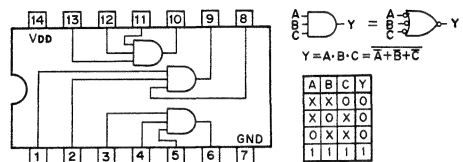
TC4069UBP (TOSHIBA)
 μPD4069C (NEC)
 μPD4069UBC (NEC)
 MB84069B (FUJITSU)
 MB84069UB (FUJITSU)
 HD14069BP (HITACHI)
 HD14069UBP (HITACHI)
 MC14069UBCP (MOTOROLA)
 C-MOS INVERTER
 — TOP VIEW —



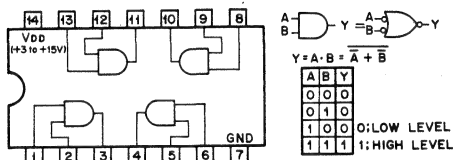
TC4071BP (TOSHIBA)
 μPD4071BC (NEC)
 MC14071BCP (MOTOROLA)
 C-MOS 2-INPUT OR GATE
 — TOP VIEW —



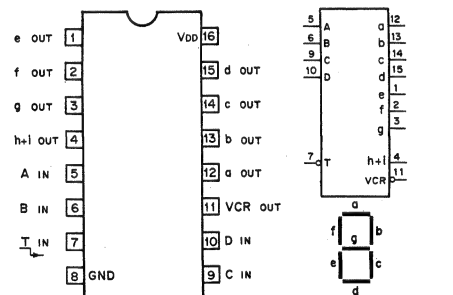
TC4073BP (TOSHIBA)
 μPD4073BC (NEC)
 MC14073BCP (MOTOROLA)
 C-MOS 3-INPUT POSITIVE AND GATE
 — TOP VIEW —



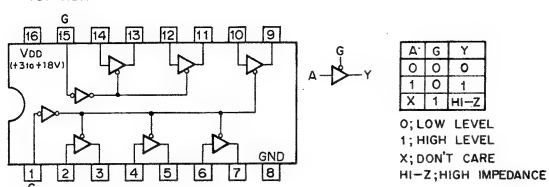
TC4081BP (TOSHIBA)
 MB84081B (FUJITSU)
 MC14081BCP (MOTOROLA)
 μPD4081BC (NEC)
 C-MOS 2-INPUT AND GATE
 — TOP VIEW —



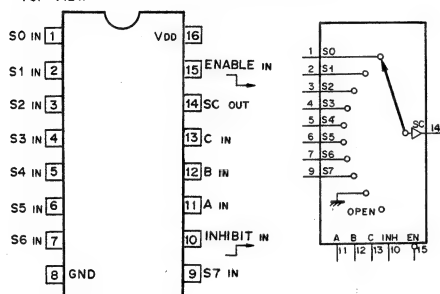
MC14495P (MOTOROLA)
 C-MOS BCD-TO-SEVEN-SEGMENT 4-BIT LATCH/DECODER DRIVER
 — TOP VIEW —



HD14503BP (HITACHI)
MC14503BCP (MOTOROLA)
C-MOS NON-INVERTING 3-STATE BUFFER
— TOP VIEW —

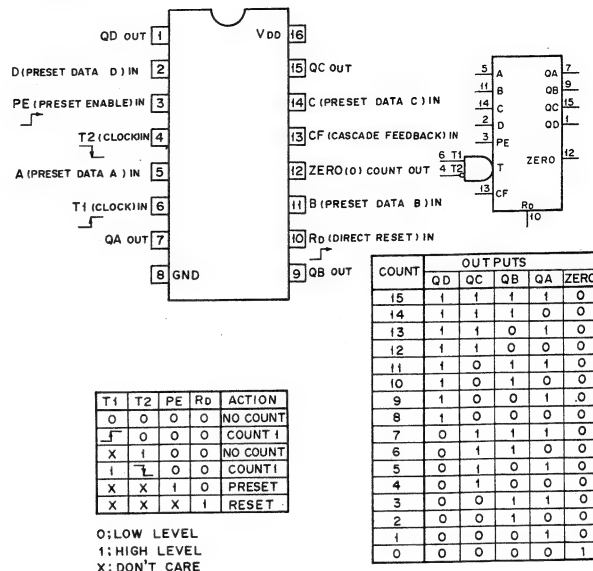


TC4512BP (TOSHIBA)
MC14512BCP (MOTOROLA)
C-MOS 8-CHANNEL DATA SELECTOR/MULTIPLEXER
-TOP VIEW-

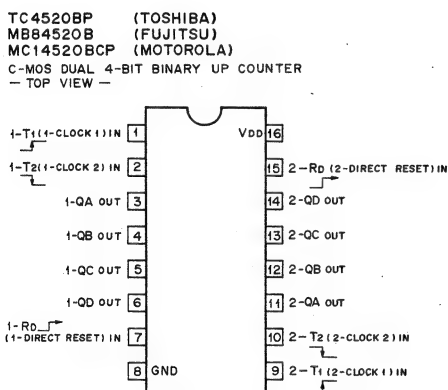
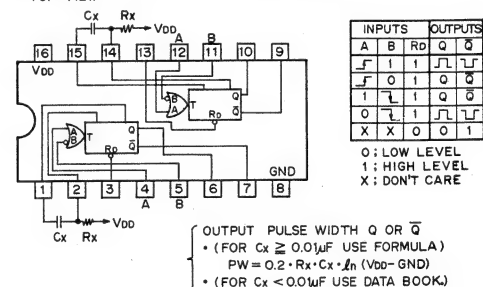


CONTROL INPUTS					OUTPUT
EN	INH	C	B	A	SC
0	0	0	0	0	S0
0	0	0	0	1	S1
0	0	0	1	0	S2
0	0	0	1	1	S3
0	0	1	0	0	S4
0	0	1	0	1	S5
0	0	1	1	0	S6
0	0	1	1	1	S7
0	1	X	X	X	GND
1	X	X	X	X	OPEN

MC14526 BCP (MOTOROLA)
C-MOS PROGRAMMABLE DIVIDE-BY-N 4-BIT BINARY DOWN COUNTER
—TOP VIEW—



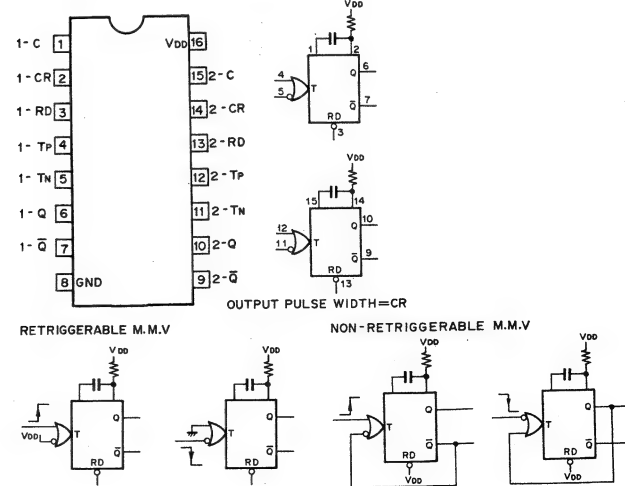
TC4528BP (TOSHIBA)
 μ PD4528C (NEC)
 MC14528BCP (MOTOROLA)
 C-MOS RETRIGGERABLE / RESETTABLE MMV
 —TOP VIEW—



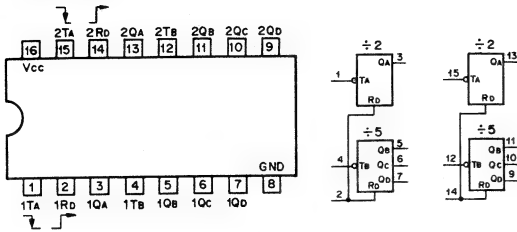
STATE	OUTPUTS			
	OD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

T1	T2	Rd	ACTION
1	0	0	INCREMENT COUNTER
0	1	0	INCREMENT COUNTER
1	X	0	NO CHANGE
X	1	0	NO CHANGE
1	0	0	NO CHANGE
1	1	0	NO CHANGE
X	X	1	QA THRU QD = 0

HD14538BP (HITACHI)
MC14538BCP (MOTOROLA)
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE
MONOSTABLE MULTIVIBRATOR
-TOP VIEW-



1C40H390P (TOSHIBA)
C-MOS DIVIDE-BY-2 AND DIVIDE-BY-5 COUNTER
— TOP VIEW —



COUNT SEQUENCE

COUNT	QA
0	0
1	1

÷5 SECTION

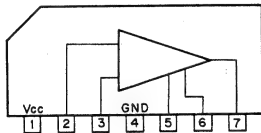
COUNT	Qd	Qc	Qb
0	0	0	0
1	0	0	1
2	0	1	0
3	0	1	1
4	1	0	0

RESET/COUNT FUNCTION

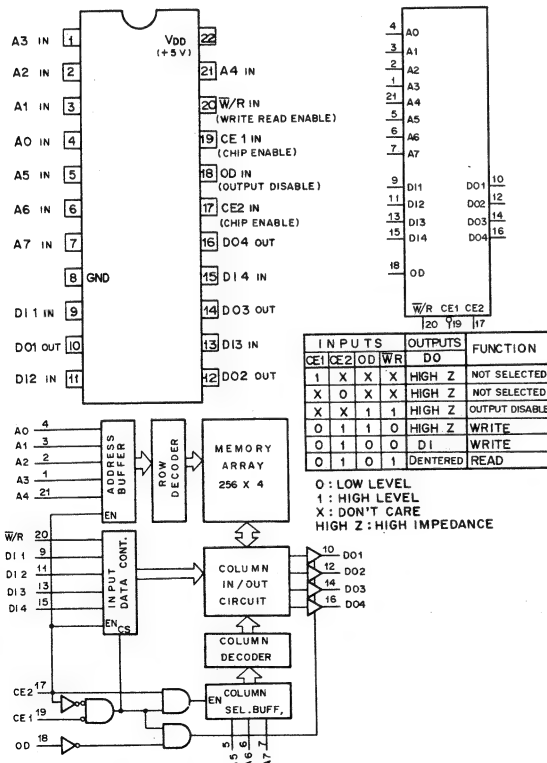
Rd	Qd	Qc	Qb	QA
1	0	0	0	0
0	COUNT			

0: LOW LEVEL
1: HIGH LEVEL

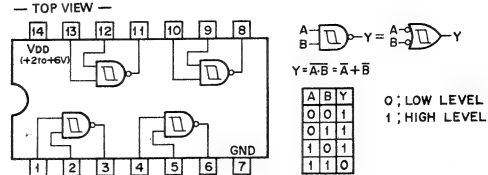
TA7069P (TOSHIBA)
VIDEO AMPLIFIER
— SIDE VIEW —



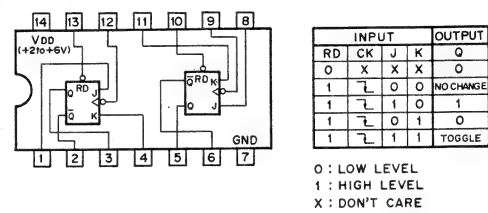
TC5501P (TOSHIBA) (ACCESS TIME = 450 nS)
TC5501P-1 (TOSHIBA) (ACCESS TIME = 650 nS)
uPD5101LC-1 (NEC) (ACCESS TIME = 450 nS)
5101L-1 (INTEL) (ACCESS TIME = 450 nS)
C-MOS 1024-BIT(256x4) STATIC RAM
— TOP VIEW —



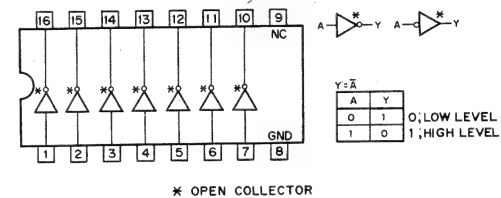
TC74HC107P (TOSHIBA)
HD74HC107P (HITACHI)
MC74HC107N (MOTOROLA)
C-MOS DUAL J-K FLIP-FLOPS
— TOP VIEW —



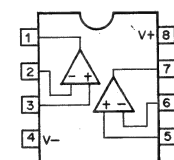
TC74HC132P (TOSHIBA)
HD74HC132P (HITACHI)
MC74HC132N (MOTOROLA)
C-MOS 2-INPUT HAND SCHMITT TRIGGER
— TOP VIEW —



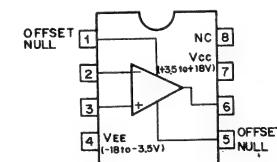
TD62105P (TOSHIBA)
TTL INVERTING DRIVER WITH OPEN COLLECTOR
— TOP VIEW —



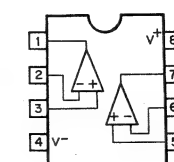
TL072CP (TI)
TL072ACP (TI)
TL072BCP (TI)
OPERATIONAL AMPLIFIER
(LOW-NOISE, JFET-INPUT)
— TOP VIEW —



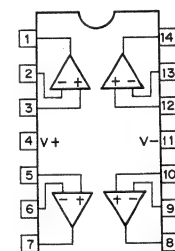
TL081CP (TI)
OPERATIONAL AMPLIFIER
(JFET INPUT)
— TOP VIEW —



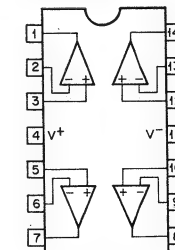
TL082CP (TI)
uPC4082C (NEC)
TL082ACP (TI)
TL082BCP (TI)
OPERATIONAL AMPLIFIER
(JFET-INPUT)
— TOP VIEW —



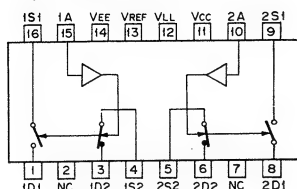
TL074CN (TI)
TL074ACN (TI)
TL074BCN (TI)
OPERATIONAL AMPLIFIER
(LOW-NOISE, JFET-INPUT)
— TOP VIEW —



TL084CN (TI)
TL084ACN (TI)
TL084BCN (TI)
OPERATIONAL AMPLIFIER
(JFET-INPUT)
— TOP VIEW —



TL191CN (TI)
TWIN DUAL COMPLEMENTARY
BI-MOS ANALOG SWITCH
— TOP VIEW —

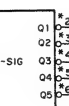
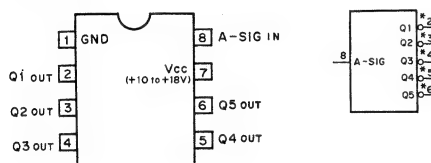


A	S1	S2
1	ON	OFF
0	OFF	ON

0; LOW LEVEL
1; HIGH LEVEL

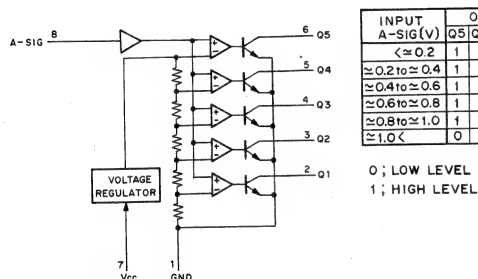


TL489CP (TI)
5-STEP ANALOG LEVEL DETECTOR WITH OPEN COLLECTOR OUTPUT
— TOP VIEW —

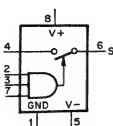
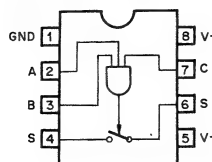


INPUT A-SIG (V)	Q5	Q4	Q3	Q2	Q1
$< \approx 0.2$	1	1	1	1	1
≈ 0.2 to ≈ 0.4	1	1	1	1	0
≈ 0.4 to ≈ 0.6	1	1	1	0	0
≈ 0.6 to ≈ 0.8	1	1	0	0	0
≈ 0.8 to ≈ 1.0	1	0	0	0	0
≈ 1.0 and above	0	0	0	0	0

0; LOW LEVEL
1; HIGH LEVEL



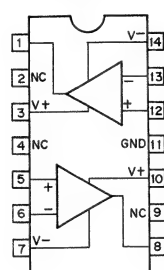
TL610CP (TI)
MOS ANALOG SWITCH
— TOP VIEW —



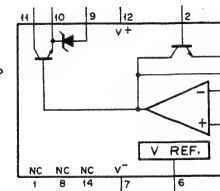
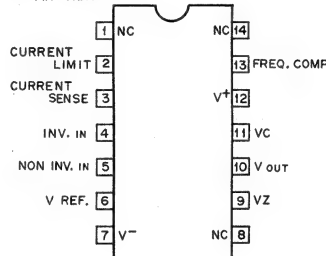
CONT	IN	S
A	B	C
0	X	X
X	0	X
X	X	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

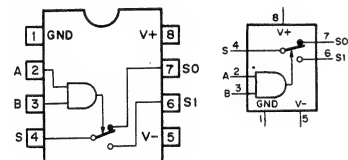
TL820CN (TI)
VOLTAGE COMPARATOR
(DIFFERENTIAL INPUTS)
— TOP VIEW —



uA723CN (TI)
uA723DC (FSC)
HA17723G (HITACHI)
VOLTAGE REGULATOR
— TOP VIEW —



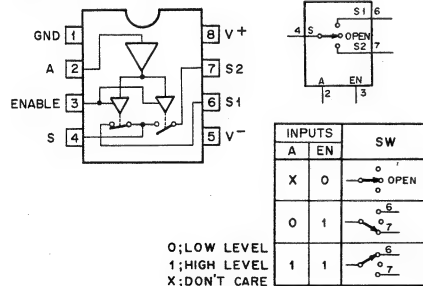
TL601CP (TI)
P-MOS ANALOG SWITCH
— TOP VIEW —



CONT	IN	ON CHANNEL
A	B	
0	0	SO
0	1	SO
1	0	SO
1	1	S1

0; LOW LEVEL
1; HIGH LEVEL

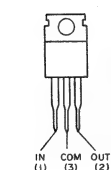
TL607CP (TI)
SN72607P (TI)
MOS ANALOG SWITCH
— TOP VIEW —



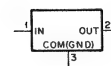
INPUTS		SW
A	EN	
X	0	OPEN
0	1	6
1	1	7

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

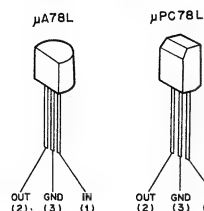
uA7800UC (FSC)
uPC14300H (NEC)
uPC7800H (NEC)
POSITIVE VOLTAGE REGULATOR (1A)



5V	uA7805UC	FS7805	uPC14305H	uPC7805H
6V	uA7806UC			
8V	uA7808UC		uPC14308H	uPC7808H
8.5V	uA7885UC			
12V	uA7812UC	FS7812	uPC14312H	uPC7812H
15V	uA7815UC	FS7815	uPC14315H	uPC7815H
18V	uA7818UC		uPC14318H	uPC7818H
24V	uA7824UC	FS7824	uPC14324H	uPC7824H



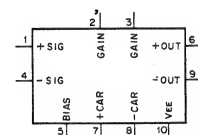
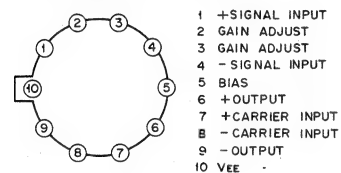
μ A78L□□AWV (FSC)
 μ A78L□□ACL (TI)
 μ PC78L□□ (NEC)
 μ PC78L□□A (NEC)
 POSITIVE VOLTAGE REGULATOR (100mA)



2.6V	μ A78L26AWV	μ A78L02ACL	μ PC78L05 (A)
5V	μ A78L05AWV	μ A78L05ACL	
6.2V	μ A78L62AWV	μ A78L06ACL	μ PC78L08
8V	μ A78L82AWV	μ A78L08ACL	
8.2V	μ A78L82AWV	μ A78L09ACL	
9V	μ A78L09AWV	μ A78L10ACL	
10V		μ A78L10ACL	
12V	μ A78L12AWV	μ A78L12ACL	μ PC78L12
15V	μ A78L15AWV	μ A78L15ACL	μ PC78L15
18V	μ A78L18AWV		
24V	μ A78L24AWV		

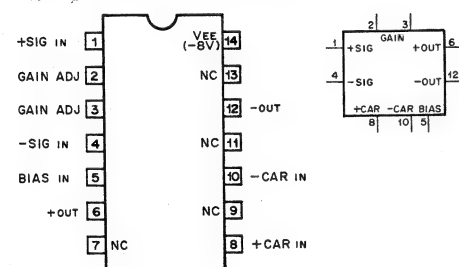
μ A796HC (FSC)
 μ A796HCA (FSC)
 MC1596G (MOTOROLA)
 DOUBLE-BALANCED MOD/DEM.

— BOTTOM VIEW —



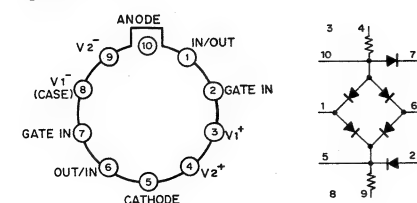
μ A796PC (FSC)
 MC1496P (MOTOROLA)
 BALANCED MODULATOR / DEMODULATOR

— TOP VIEW —



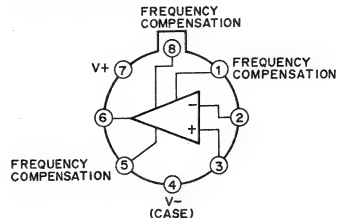
μ PC91A (NEC)
 ANALOG SWITCH

— BOTTOM VIEW —



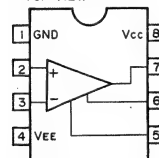
μ PC159A (NEC)
 OPERATIONAL AMPLIFIER
 (HIGH SPEED, WIDE BANDWIDTH)

— BOTTOM VIEW —



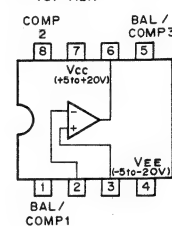
μ PC311C (NEC)
 VOLTAGE COMPARATOR

— TOP VIEW —



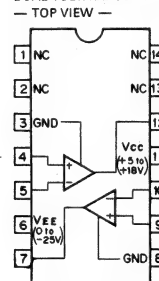
μ PC318C (NEC)
 HIGH-PERFORMANCE OPERATIONAL AMPLIFIER

— TOP VIEW —



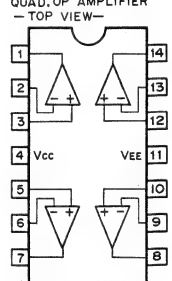
μ PC272C (NEC)
 μ PC319C (NEC)
 DUAL VOLTAGE COMPARATOR

— TOP VIEW —



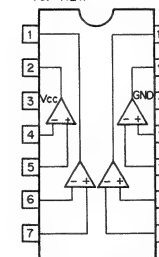
μ PC324C (NEC)
 QUAD. OP. AMPLIFIER

— TOP VIEW —



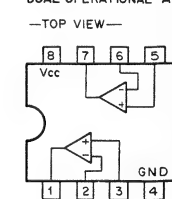
μ PC339C (NEC)
 COMPARATOR

— TOP VIEW —



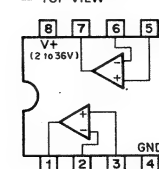
μ PC358C (NEC)
 LM358P (TI)
 DUAL OPERATIONAL AMPLIFIERS

— TOP VIEW —

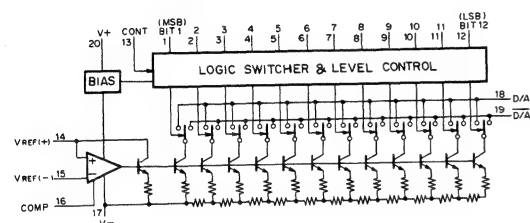
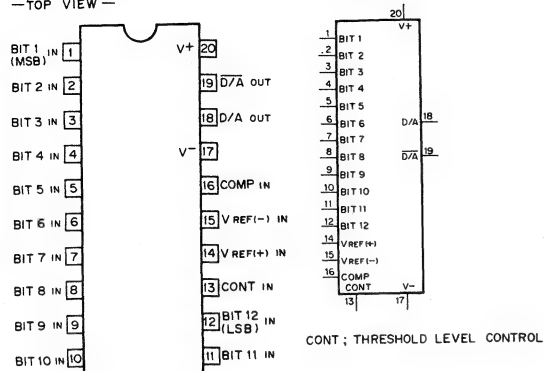


μ PC393C (NEC)
 μ PC393G (NEC)
 BA6993 (ROHM)
 VOLTAGE COMPARATOR

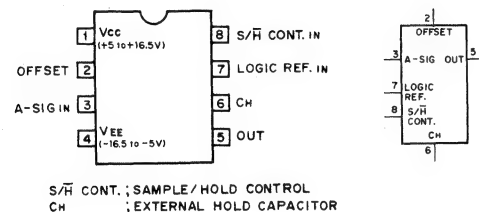
— TOP VIEW —



μPC648D (NEC)
12-BIT D/A CONVERTER WITH OPEN COLLECTOR OUTPUT
—TOP VIEW—

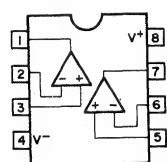


μPC649C (NEC)
SAMPLE AND HOLD CIRCUIT
—TOP VIEW—

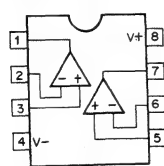


S/H CONT.; SAMPLE/HOLD CONTROL
CH; EXTERNAL HOLD CAPACITOR

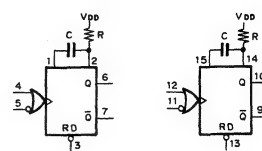
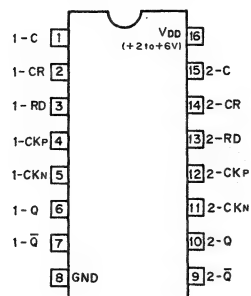
μPC4556C (NEC)
OPERATIONAL AMPLIFIER
(WIDE BAND, DECOMPENSATED)
—TOP VIEW—



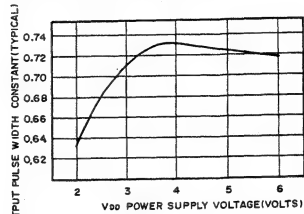
μPC4557C (NEC)
OPERATIONAL AMPLIFIER
(WIDE BAND, LOW NOISE)
—TOP VIEW—



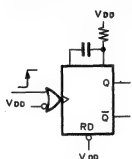
TC74HC4538P (TOSHIBA)
C-MOS DUAL RETRIGGERABLE/NON-RETRIGGERABLE MONOSTABLE MULTIVIBRATOR
—TOP VIEW—



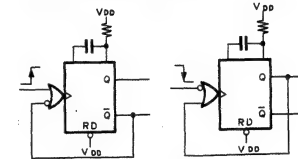
OUTPUT PULSE WIDTH = $k \cdot C \cdot R$



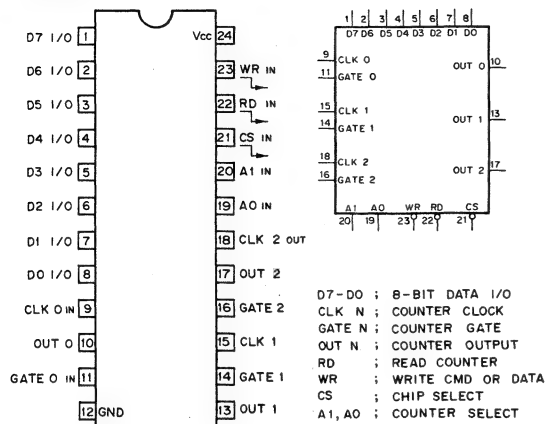
RETRIGGERABLE M.V.



NON-RETRIGGERABLE M.V.



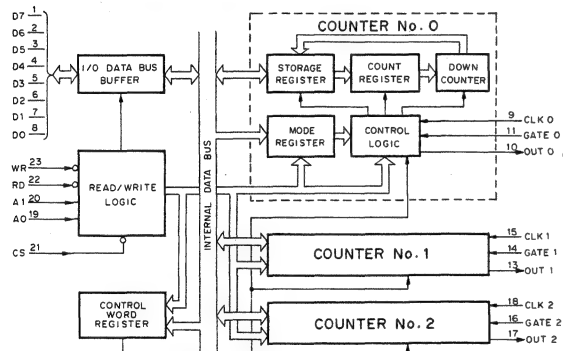
μPD8253C-5 (NEC)
8253-5 (INTEL)
N-MOS PROGRAMMABLE INTERVAL TIMER
— TOP VIEW —



FUNCTION TABLE

CS	RD	WR	A1	A0	FUNCTION
0	1	0	0	0	Load Counter No. 0
0	1	0	0	1	Load Counter No. 1
0	1	0	1	0	Load Counter No. 2
0	1	0	1	1	Control Word
0	0	1	0	0	Read Counter 0
0	0	1	0	1	Read Counter 1
0	0	1	1	0	Read Counter 2
0	0	1	1	1	No-Operation (HI-Z)
1	X	X	X	X	Disable (HI-Z)
0	1	1	X	X	No-Operation (HI-Z)

0: LOW LEVEL
1: HIGH LEVEL
X: DON'T CARE
HI-Z: HIGH IMPEDANCE



CONTROL WORD FORMAT

D7	D6	D5	D4	D3	D2	D1	D0
SC1	SC2	RL1	RL0	M2	M1	M0	BCD

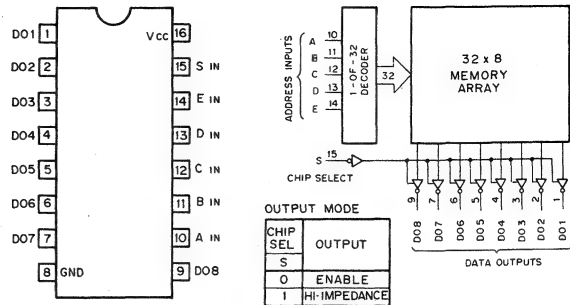
BCD	OPERATION
0	16-BIT BINARY
1	BCD(4-DECADE)

M2	M1	M0	MODE
0	0	0	0
0	0	1	1
X	1	0	2
X	1	1	3
1	0	0	4
1	0	1	5

RL1	RL0	OPERATION
0	0	COUNTER LATCHING
0	1	READ/LOAD LSB ONLY
1	0	READ/LOAD MSB ONLY
1	1	LSB FIRST THEN MSB

SC1	SC0	SELECTED COUNTER
0	0	COUNTER No. 0
0	1	COUNTER No. 1
1	0	COUNTER No. 2
1	1	ILLEGAL

MB7051 (FUJITSU)
256-BIT (32x8) PROM (3-STATE OUTPUT)
— TOP VIEW —



MB7051-A1U1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXA DECIMAL)
0-15	3F, 1E, 39, 1B, 27, 36, 20, 3F, 3F, 2D, 36, 27, 1B, 39, 1E, 3F,
16-31	3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F, 3F,

MB7051-E1U1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXA DECIMAL)
0-15	00, 03, 00, 03, 01, 03, 01, 03, 00, 03, 00, 03, 01, 03, 01, 03,
16-31	00, 03, 02, 03, 01, 03, 01, 03, 00, 03, 02, 03, 01, 03, 01, 03,

MB7051-L1A1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXA DECIMAL)
0-15	FF, FB, F1, FD, FF, DF, FF, F9, 8D, 1A, E0, F8, F0, DE, FC, FF,
16-31	D5, B0, 88, 8E, F2, D0, F2, 7E, 88, C3, F1, F9, FD, FE, FC, FC,

MB7051-L1U1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXA DECIMAL)
0-15	FF, FE, F8, F7, FF, E7, FF, FA, 7F, 81, DF, FB, F6, E7, F4, FF,
16-31	95, B0, B0, E2, F1, D8, F4, E6, 88, 91, F7, FC, F3, FD, FC, FC,

MB7051-L2A1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXA DECIMAL)
0-15	3A, 3A, 38, B8, 98, B8, BE, BE, B6, B7, 37, 33, 31, B1, B1, B7,
16-31	B7, B6, B6, B6, F6, F6, F6, B6, B6, B6, 36, 36, 36, 3E, 3E, 3A,

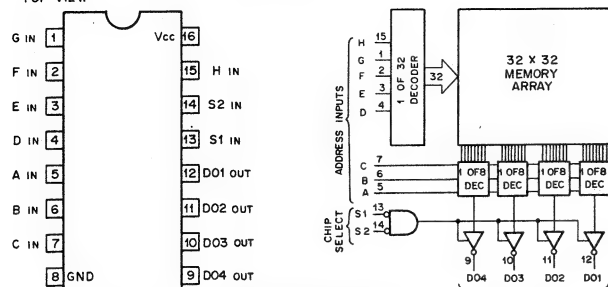
MB7051-L2U1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXA DECIMAL)
0-15	3A, 3A, 38, B8, 98, B8, BE, BE, B6, B7, 37, 33, 31, B1, B1, B7,
16-31	B7, B6, B6, B6, F6, F6, F6, B6, B6, B6, 36, 36, 36, 3E, 3E, 3A,

MB7051-R2U1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXA DECIMAL)
0-15	10, 10, 01, 05, 0E, 0F, 18, 18, 30, 10, 01, 05, 0E, 0F, 18, 18,
16-31	17, 17, 00, 01, 0A, 0B, 1F, 3F, 17, 17, 00, 01, 0A, 0B, 1F, 1F,

MB7052 (FUJITSU)
1024-BIT (256 x 4) PROM (3-STATE OUTPUT)
— TOP VIEW —



WORD/ADDRESS TABLE

WORD	H	G	F	E	D	C	B	A
0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	1	0
3	0	0	0	0	0	0	1	1
4	0	0	0	0	0	1	0	0
5	0	0	0	0	0	1	0	1
6	0	0	0	0	0	1	1	0
7	0	0	0	0	0	1	1	1
8	0	0	0	0	1	0	0	0
9	0	0	0	0	1	0	0	1
10	0	0	0	0	1	0	1	0
11	0	0	0	0	1	0	1	1
12	0	0	0	0	1	1	0	0
13	0	0	0	0	1	1	0	1
14	0	0	0	0	1	1	1	0
15	0	0	0	0	1	1	1	1

DATA CODE/ACTUAL DATA

DATA CODE	DO4	DO3	DO2	DO1
0	0	0	0	0
1	1	0	0	0
2	2	0	0	1
3	3	0	0	1
4	4	0	1	0
5	5	0	1	0
6	6	0	1	1
7	7	0	1	1
8	8	1	0	0
9	9	1	0	0
10	A	1	0	1
11	B	1	0	1
12	C	1	1	0
13	D	1	1	0
14	E	1	1	1
15	F	1	1	1

OUTPUT MODE

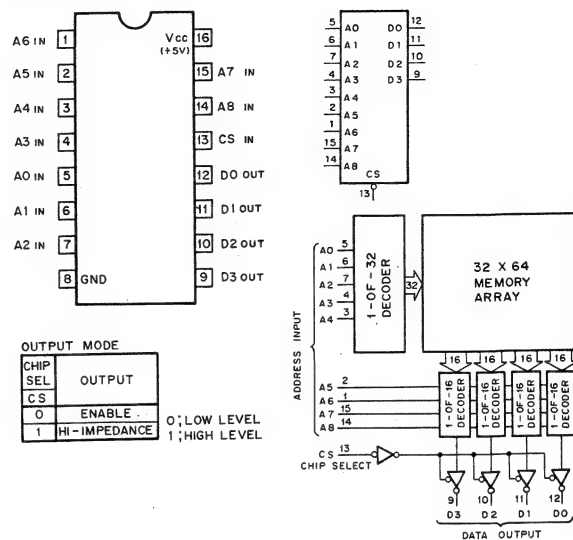
CHIP SEL	OUTPUT
S1	S2
0	0
X	1
1	X

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

MB7052-R1U1
PROGRAMMED DATA

WORD (ADDRESS)	DATA OUTPUTS (IN HEXADECIMAL)
0 - 15	0.3.6.1.7.2.3.2.2.3.2.7.1.6.3.0.
16 - 31	0.3.6.1.7.2.3.2.2.3.2.7.1.6.3.0.
32 - 47	8.B.E.9.F.A.B.A.A.B.A.F.9.E.B.8.
48 - 63	0.3.6.1.7.2.3.2.2.3.2.7.1.6.3.0.
64 - 79	4.3.6.5.7.6.7.2.2.7.6.7.5.6.3.4.
80 - 95	C.B.E.D.F.E.F.A.A.F.E.F.D.E.B.C.
96 - 111	4.3.6.5.7.6.7.2.2.7.6.7.5.6.3.4.
112 - 127	4.3.6.5.7.6.7.2.2.7.6.7.5.6.3.4.
128 - 143	0.3.6.1.7.2.3.2.2.3.2.7.1.6.3.0.
144 - 159	0.3.6.1.7.2.3.2.2.3.2.7.1.6.3.0.
160 - 175	8.B.E.9.F.A.B.A.A.B.A.F.9.E.B.8.
176 - 191	0.3.6.1.7.2.3.2.2.3.2.7.1.6.3.0.
192 - 207	4.3.6.5.7.6.7.2.2.7.6.7.5.6.3.4.
208 - 223	C.B.E.D.F.E.F.A.A.F.E.F.D.E.B.C.
224 - 239	4.3.6.5.7.6.7.2.2.7.6.7.5.6.3.4.
240 - 255	4.3.6.5.7.6.7.2.2.7.6.7.5.6.3.4.

MB7053 (FUJITSU)
2048-BIT (512 x 4) PROM (3-STATE OUTPUT)
— TOP VIEW —



OUTPUT MODE

CHIP SEL	OUTPUT
CS	S1
0	0
1	1

0; LOW LEVEL
1; HIGH LEVEL

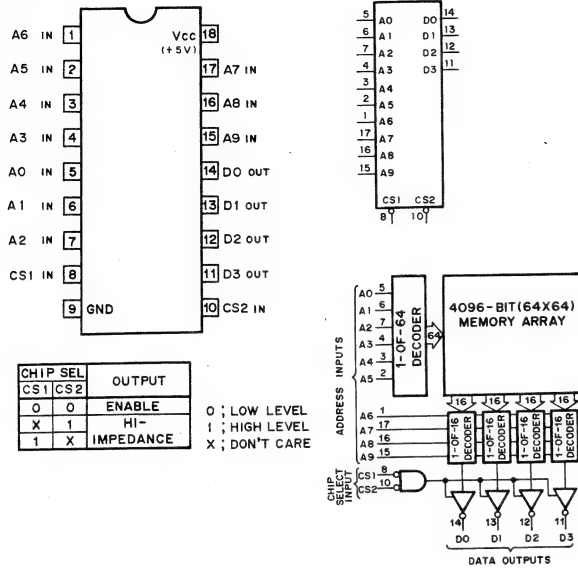
WORD/ADDRESS TABLE

WORD	A8	A7	A6	A5	A4	A3	A2	A1	A0
0	000	0	0	0	0	0	0	0	0
1	001	0	0	0	0	0	0	0	1
2	002	0	0	0	0	0	0	1	0
3	003	0	0	0	0	0	0	1	1
4	004	0	0	0	0	0	1	0	0
5	005	0	0	0	0	0	1	0	1
6	006	0	0	0	0	0	1	1	0
7	007	0	0	0	0	0	1	1	1
8	008	0	0	0	0	1	0	0	0
9	009	0	0	0	0	1	0	0	1
10	010	0	0	0	0	1	0	1	0
11	011	0	0	0	0	1	0	1	1
12	012	0	0	0	0	1	1	0	0
13	013	0	0	0	0	1	1	0	1
14	014	0	0	0	0	1	1	1	0
15	015	0	0	0	0	1	1	1	1
16	016	0	0	0	1	0	0	0	0
17	017	0	0	0	1	0	0	0	1
18	018	0	0	0	1	0	0	1	0
19	019	0	0	0	1	0	0	1	1
20	020	0	0	0	1	0	1	0	0
21	021	0	0	0	1	0	1	0	1
22	022	0	0	0	1	0	1	1	0
23	023	0	0	0	1	0	1	1	1
24	024	0	0	0	1	1	0	0	0
25	025	0	0	0	1	1	0	0	1
26	026	0	0	0	1	1	0	1	0
27	027	0	0	0	1	1	0	1	1
28	028	0	0	0	1	1	1	0	0
29	029	0	0	0	1	1	1	0	1
30	030	0	0	0	1	1	1	1	0
31	031	0	0	0	1	1	1	1	1

DATA CODE/ACTUAL DATA

DATA CODE	D3	D2	D1	D0
0	0	0	0	0
1	1	1	0	0
2	2	2	0	1
3	3	3	0	1
4	4	4	0	1
5	5	5	0	1
6	6	6	0	1
7	7	7	0	1
8	8	8	1	0
9	9	9	1	0
10	A	A	1	0
11	B	B	1	0
12	C	C	1	0
13	D	D	1	0
14	E	E	1	0
15	F	F	1	0

MB7054 (FUJITSU)
uPB426D (NEC)
4096-BIT (1024x4) PROM (3-STATE OUTPUT)
— TOP VIEW —



WORD/ADDRESS TABLE

WORD	ADDRESS INPUTS									
	A9	A8	A7	A6	A5	A4	A3	A2	A1	A0
0	000	0	0	0	0	0	0	0	0	0
1	001	0	0	0	0	0	0	0	0	1
2	002	0	0	0	0	0	0	0	0	1
3	003	0	0	0	0	0	0	0	0	1
4	004	0	0	0	0	0	0	1	0	0
5	005	0	0	0	0	0	0	1	0	1
6	006	0	0	0	0	0	0	1	1	0
7	007	0	0	0	0	0	0	1	1	1
8	008	0	0	0	0	0	1	0	0	0
9	009	0	0	0	0	0	0	1	0	1
10	00A	0	0	0	0	0	0	1	0	1
11	00B	0	0	0	0	0	0	1	0	1
12	00C	0	0	0	0	0	0	1	1	0
13	00D	0	0	0	0	0	0	1	1	0
14	00E	0	0	0	0	0	0	1	1	0
15	00F	0	0	0	0	0	0	1	1	1
16	010	0	0	0	0	0	1	0	0	0
17	011	0	0	0	0	0	1	0	0	1
18	012	0	0	0	0	0	1	0	0	1
19	013	0	0	0	0	0	1	0	0	1
20	014	0	0	0	1	0	0	0	0	0
21	015	0	0	0	1	0	0	0	0	1
22	016	0	0	0	1	0	0	1	0	0
23	017	0	0	0	1	0	0	1	0	1
24	018	0	0	0	1	0	1	0	0	0
25	019	0	0	0	1	0	1	0	0	1
26	01A	0	0	0	1	0	1	1	0	0
27	01B	0	0	0	1	0	1	1	0	1
28	01C	0	0	0	1	1	0	0	0	0
29	01D	0	0	0	1	1	0	0	0	1
30	01E	0	0	0	1	1	0	1	0	0
31	01F	0	0	0	1	1	0	1	0	1
32	020	0	0	1	0	0	0	0	0	0
33	021	0	0	1	0	0	0	0	0	1
34	022	0	0	1	0	0	0	1	0	0
35	023	0	0	1	0	0	0	1	0	1
36	024	0	0	1	0	1	0	0	0	0
37	025	0	0	1	0	1	0	0	0	1
38	026	0	0	1	0	1	1	0	0	0
39	027	0	0	1	0	1	1	0	0	1
40	028	0	0	1	0	1	1	1	0	0
41	029	0	0	1	0	1	1	1	0	1
42	02A	0	0	1	1	0	0	0	0	0
43	02B	0	0	1	1	0	0	0	0	1
44	02C	0	0	1	1	0	0	1	0	0
45	02D	0	0	1	1	0	0	1	0	1
46	02E	0	0	1	1	1	0	0	0	0
47	02F	0	0	1	1	1	0	0	0	1
48	030	0	0	1	1	1	1	0	0	0
49	031	0	0	1	1	1	1	0	0	1
50	032	0	0	1	1	1	1	1	0	0
51	033	0	0	1	1	1	1	1	0	1
52	034	0	1	0	0	0	0	0	0	0
53	035	0	1	0	0	0	0	0	0	1
54	036	0	1	0	0	0	0	1	0	0
55	037	0	1	0	0	0	0	1	0	1
56	038	0	1	0	0	1	0	0	0	0
57	039	0	1	0	0	1	0	0	0	1
58	03A	0	1	0	0	1	0	1	0	0
59	03B	0	1	0	0	1	0	1	0	1
60	03C	0	1	0	0	1	1	0	0	0
61	03D	0	1	0	0	1	1	0	0	1
62	03E	0	1	0	0	1	1	1	0	0
63	03F	0	1	0	0	1	1	1	0	1
64	040	0	1	1	0	0	0	0	0	0
65	041	0	1	1	0	0	0	0	0	1
66	042	0	1	1	0	0	0	1	0	0
67	043	0	1	1	0	0	0	1	0	1
68	044	0	1	1	0	1	0	0	0	0
69	045	0	1	1	0	1	0	0	0	1
70	046	0	1	1	0	1	0	1	0	0
71	047	0	1	1	0	1	0	1	0	1
72	048	0	1	1	0	1	1	0	0	0
73	049	0	1	1	0	1	1	0	0	1
74	04A	0	1	1	0	1	1	1	0	0
75	04B	0	1	1	0	1	1	1	0	1
76	04C	0	1	1	1	0	0	0	0	0
77	04D	0	1	1	1	0	0	0	0	1
78	04E	0	1	1	1	0	0	1	0	0
79	04F	0	1	1	1	0	0	1	0	1
80	050	0	1	1	1	1	0	0	0	0
81	051	0	1	1	1	1	0	0	0	1
82	052	0	1	1	1	1	0	1	0	0
83	053	0	1	1	1	1	0	1	0	1
84	054	0	1	1	1	1	1	0	0	0
85	055	0	1	1	1	1	1	0	0	1
86	056	0	1	1	1	1	1	1	0	0
87	057	0	1	1	1	1	1	1	0	1
88	058	0	1	1	1	1	1	1	1	0
89	059	0	1	1	1	1	1	1	1	1
90	060	1	0	0	0	0	0	0	0	0
91	061	1	0	0	0	0	0	0	0	1
92	062	1	0	0	0	0	0	0	0	1
93	063	1	0	0	0	0	0	0	0	1
94	064	1	0	0	0	0	1	0	0	0
95	065	1	0	0	0	0	0	1	0	1
96	066	1	0	0	0	0	0	1	1	0
97	067	1	0	0	0	0	0	1	1	1
98	068	1	0	0	0	0	1	1	1	0
99	069	1	0	0	0	0	1	1	1	1
100	070	1	0	0	1	0	0	0	0	0
101	071	1	0	0	1	0	0	0	0	1
102	072	1	0	0	1	0	0	1	0	0
103	073	1	0	0	1	0	0	1	0	1
104	074	1	0	0	1	1	0	0	0	0
105	075	1	0	0	1	1	0	0	0	1
106	076	1	0	0	1	1	0	1	0	0
107	077	1	0	0	1	1	0	1	0	1
108	078	1	0	0	1	1	1	0	0	0
109	079	1	0	0	1	1	1	0	0	1
110	07A	1	0	0	1	1	1	1	0	0
111	07B	1	0	0	1	1	1	1	0	1
112	07C	1	0	1	0	0	0	0	0	0
113	07D	1	0	1	0	0	0	0	0	1
114	07E	1	0	1	0	0	0	1	0	0
115	07F	1	0	1	0	0	0	1	0	1
116	080	1	0	1	1	0	0	0	0	0
117	081	1	0	1	1	0	0	0	0	1
118	082	1	0	1	1	0	0	1	0	0
119	083	1	0	1	1	0	0	1	0	1
120	084	1	0	1	1	1	0	0	0	0
121	085	1	0	1	1	1	0	0	0	1
122	086	1	0	1	1	1	0	1	0	0
123	087	1	0	1	1	1	0	1	0	1
124	088	1	0	1	1	1	1	0	0	0
125	089	1	0	1	1	1	1	0	0	1
126	08A	1	0	1	1	1	1	1	0	0
127	08B	1	0	1	1	1	1	1	0	1
128	08C	1	0	1	1	1	1	1	1	0
129	08D	1	0	1	1	1	1	1	1	1
130	08E									

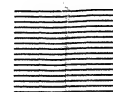
BVH-2180/PS/PM
BVH-2000/PS/PM

C-1 C-2 C-3

C-1 C-2 C-3

BVH-2500/P C-1

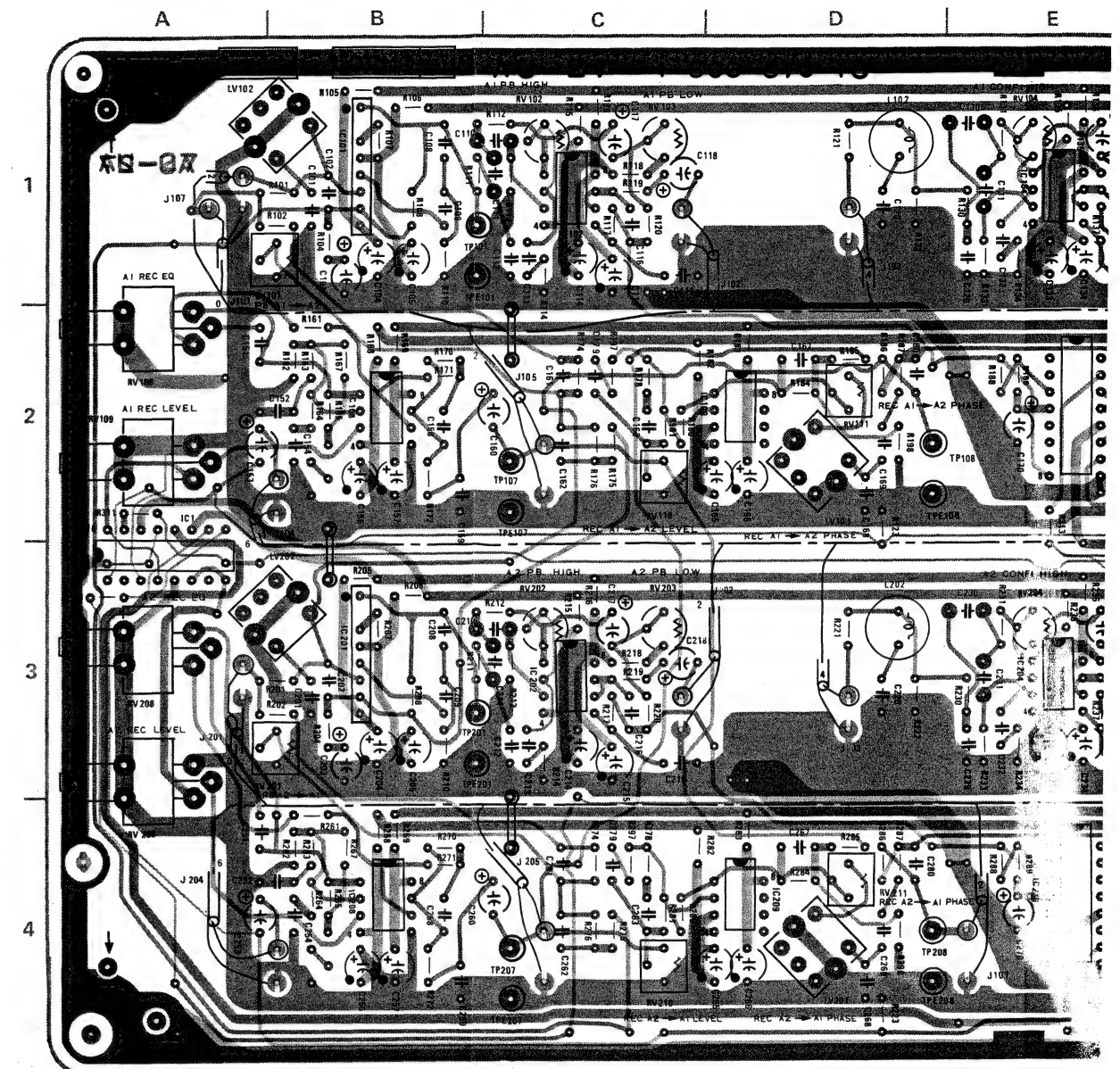
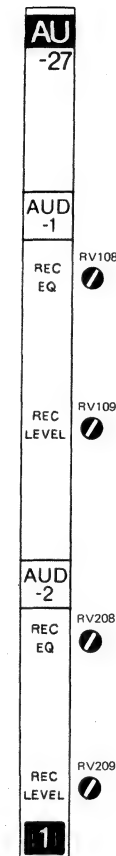
SECTION C SCHEMATIC DIAGRAM & BOARD LAYOUT



C-1

C-2 - C-3

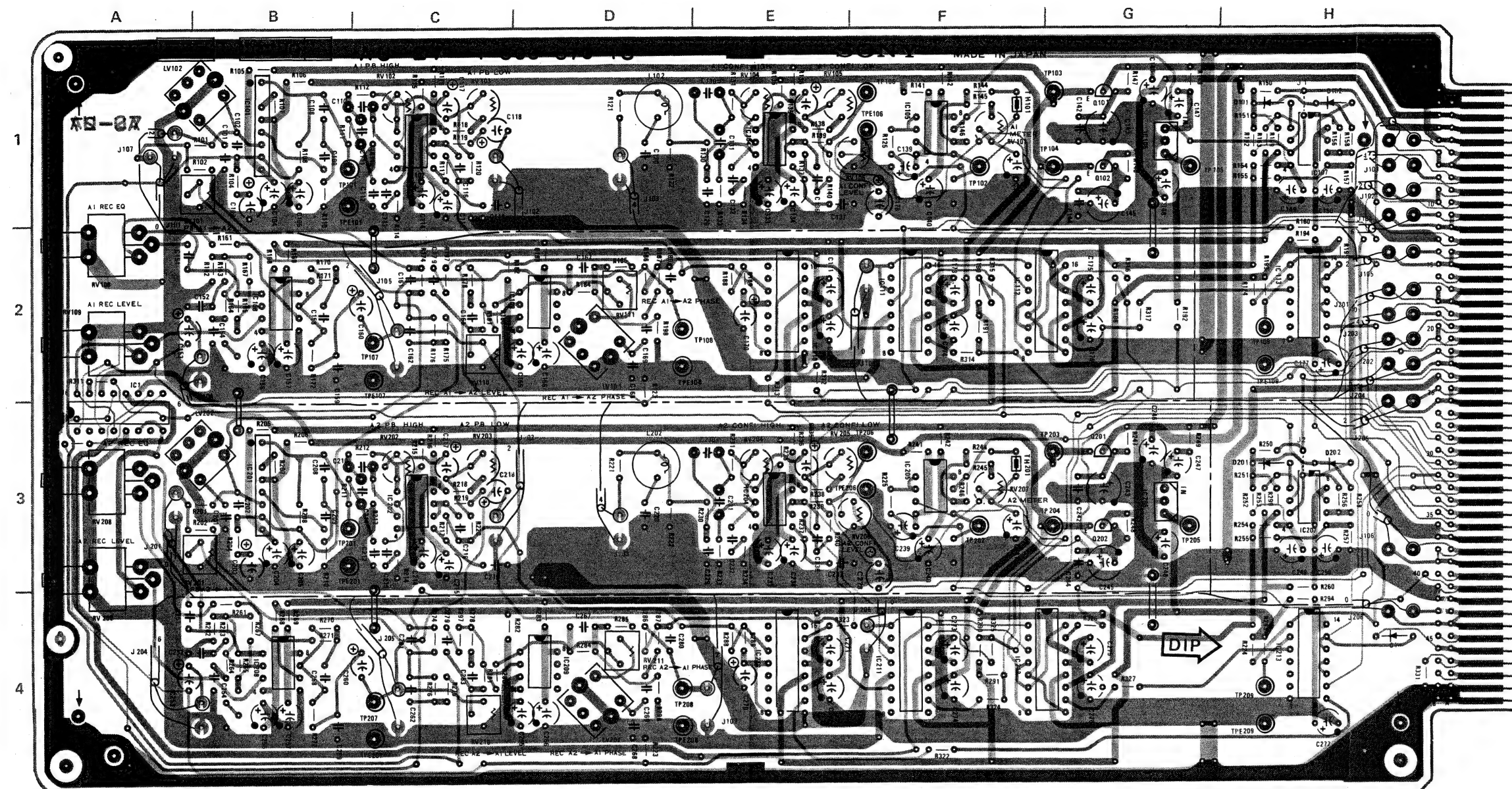
Component Side



1-606-670-16 COMPONENT SIDE

AU
-27AUD
-1REC
EQREC
LEVELAUD
-2REC
EQREC
LEVEL

1



1-606-670-16 COMPONENT SIDE

1-606-670-16 SOLDER SIDE

AU-27 (1-606-670-13 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

D1 4H	TH101 1F
D101 1H	TH202 3F
D102 1H	TP101 1C
D201 3H	TP102 1F
D202 3H	TP103 1G
IC1 3A	TP104 1G
IC101 1B	TP105 1G
IC102 1C	TP106 1F
IC104 1E	TP107 2C
IC105 1F	TP108 2D
IC106 1G	TP109 2H
IC107 1H	TP201 3C
IC108 2B	TP202 3F
IC109 2D	TP203 3G
IC110 2E	TP204 3G
IC111 2F	TP205 3G
IC112 2G	TP206 3F
IC113 2H	TP207 4C
IC201 3B	TP208 4D
IC202 3C	TP209 4H
IC204 3E	TPE101
IC205 3F	1C
IC206 3G	TPE106
IC207 3H	1F
IC208 4B	TPE107
IC209 4D	2C
IC210 4E	TPE108
IC211 4F	2D
IC212 4G	TPE109
IC213 4H	2H
J1 1H	TPE201
J2 3H	3C
LV101 2D	TPE206
LV102 1B	3F
LV201 4D	TPE207
LV202 3B	4C
Q101 1G	TPE208
Q102 1G	4D
Q201 3G	TPE209
Q202 3G	4H
RV101 1B	
RV102 1C	
RV103 1C	
RV104 1E	
RV105 1E	
RV106 1F	
RV107 1F	
RV108 2A	
RV109 2A	
RV110 2C	
RV111 2D	
RV201 3B	
RV202 3C	
RV203 3C	
RV204 3E	
RV205 3E	
RV206 3F	
RV207 3F	
RV208 3A	
RV209 3A	
RV210 4C	
RV211 2D	

C-6

C-5

C-4

BVH-2000/PS/PM
BVH-2180/PS/PM

C-6

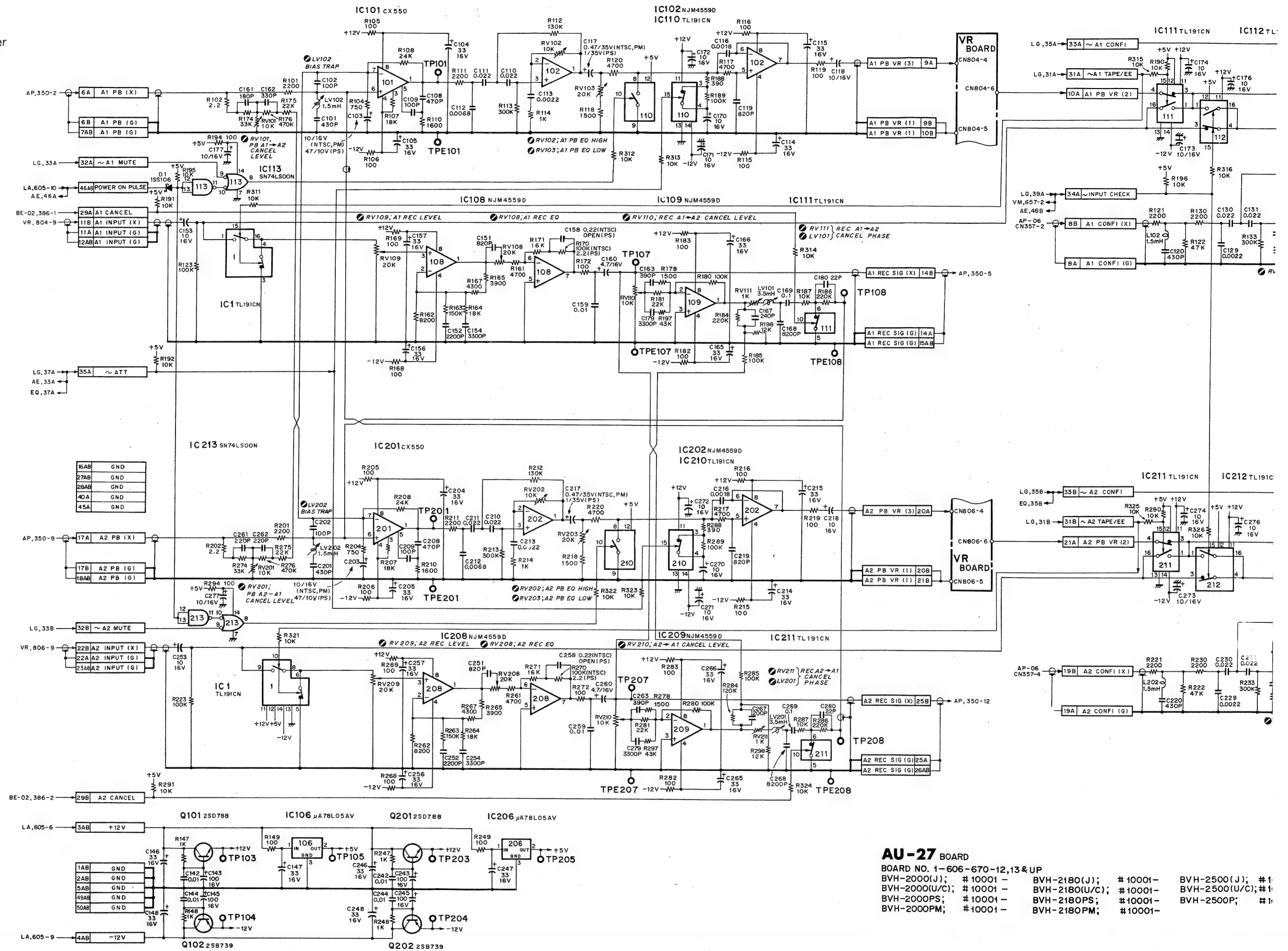
C-5

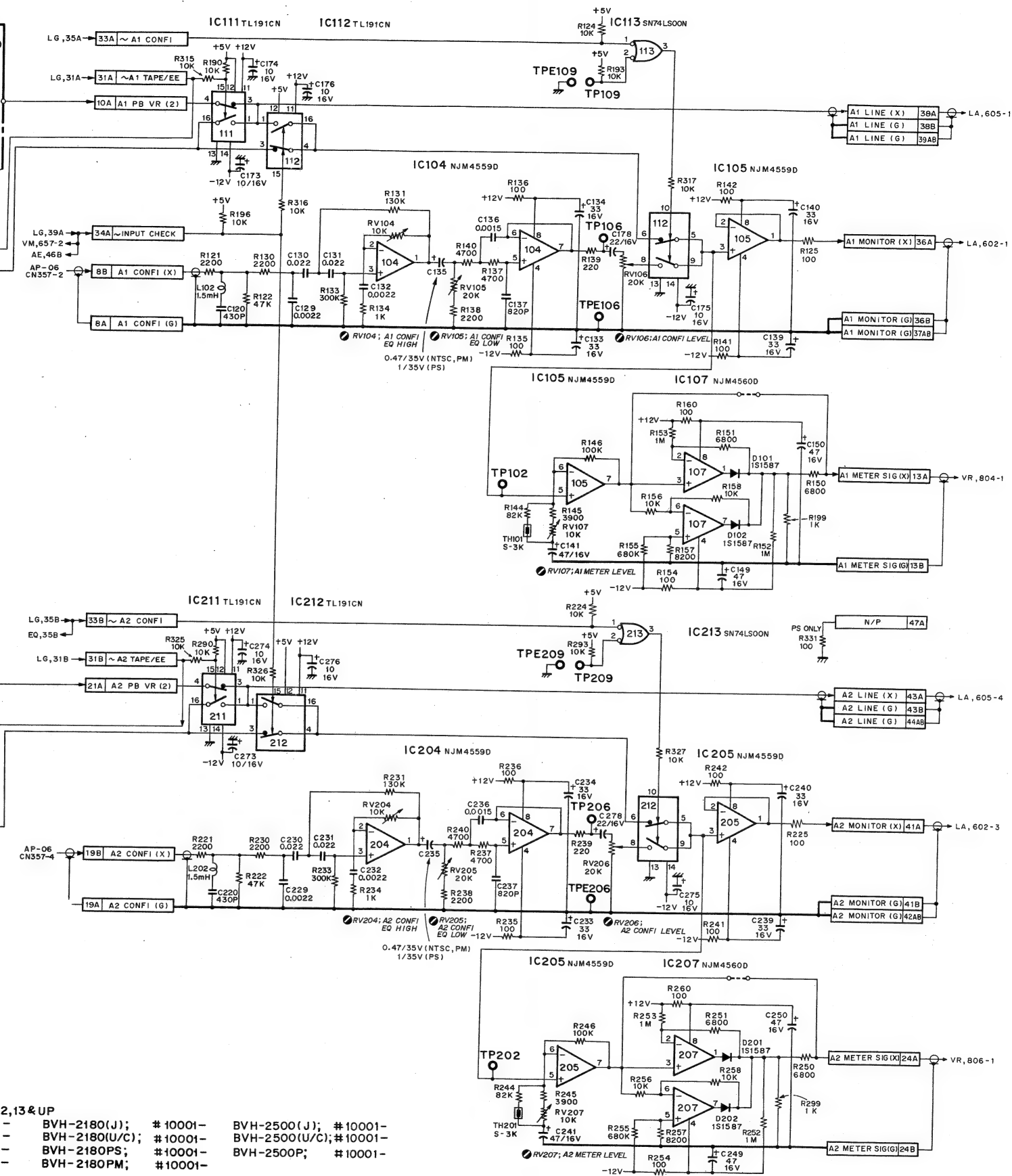
C-4

BVH-2500/P

AU-27 BOARD

Audio-1, 2 REC EQ/PB Amplifier





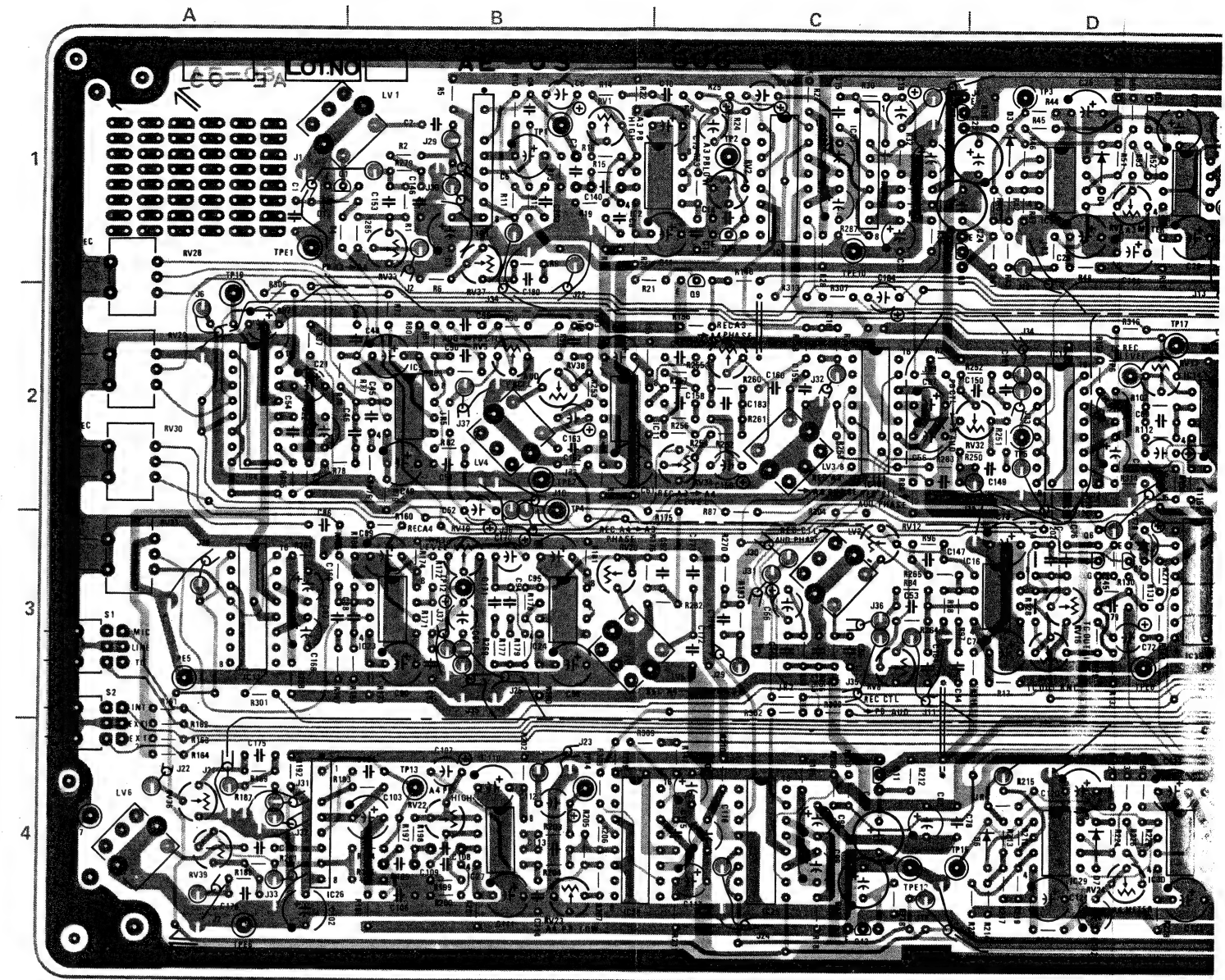
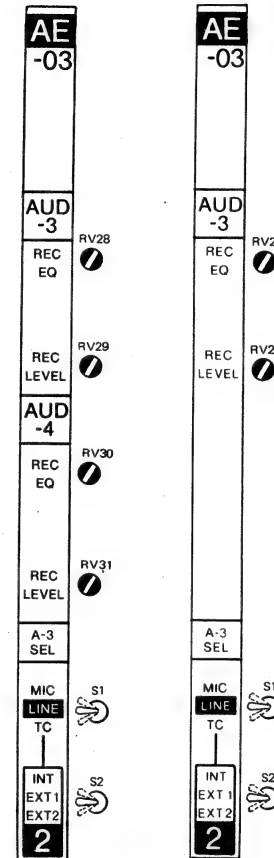
AE-03 BOARD (1-606-671-17)

Component Side

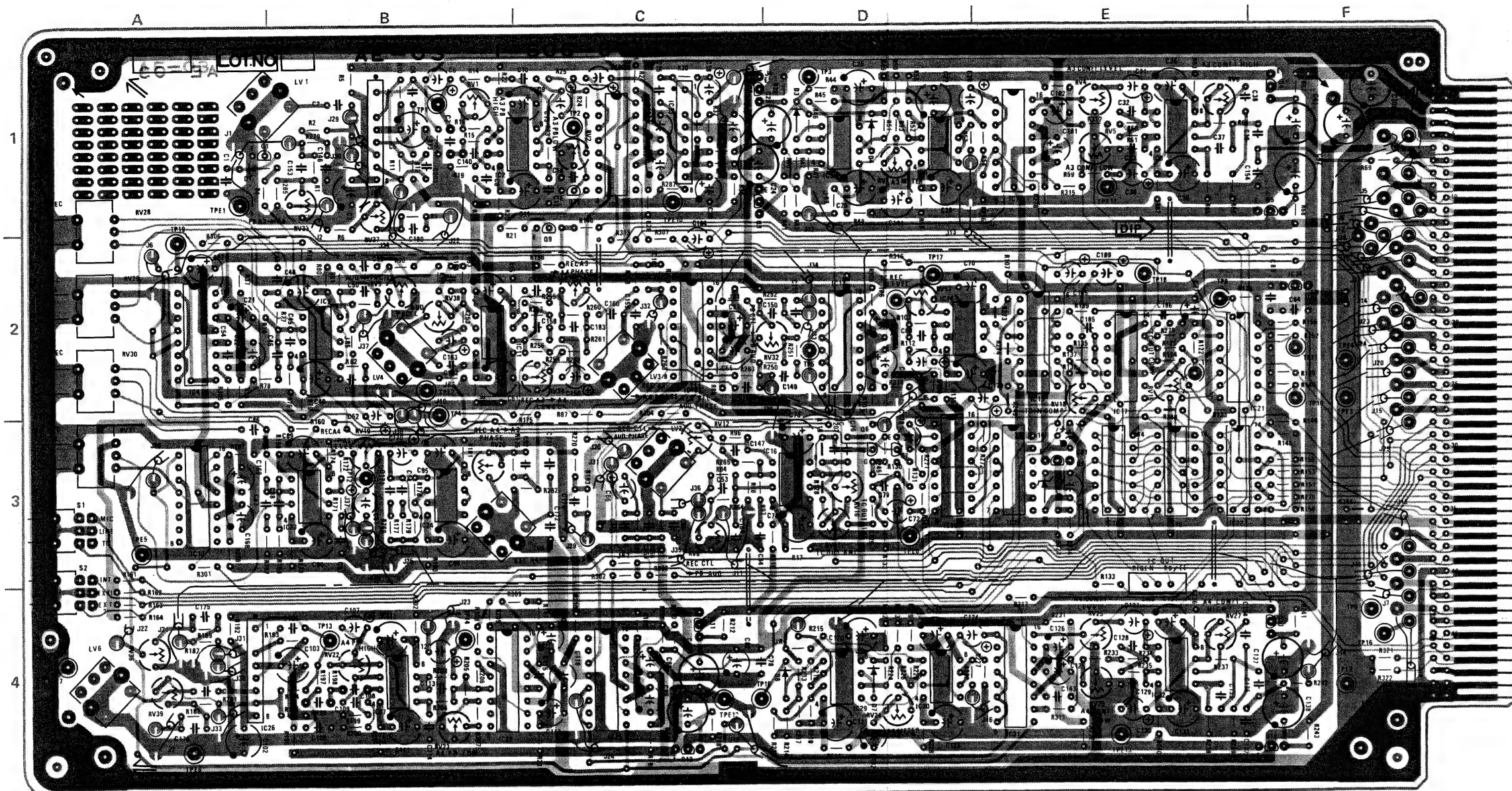
BVH-2000PS
BVH-2180PS
(for 04/14
models)

BVH-2000/PS/PM
BVH-2180/PS/PM
(for 02/12/00/10
models)

BVH-2500/P



1-606-671-17 COMPONENT SIDE



1-606-671-17 COMPONENT SIDE

1-606-671-17 SOLDER SIDE

AE-03 (1-606-671-16 & UP)

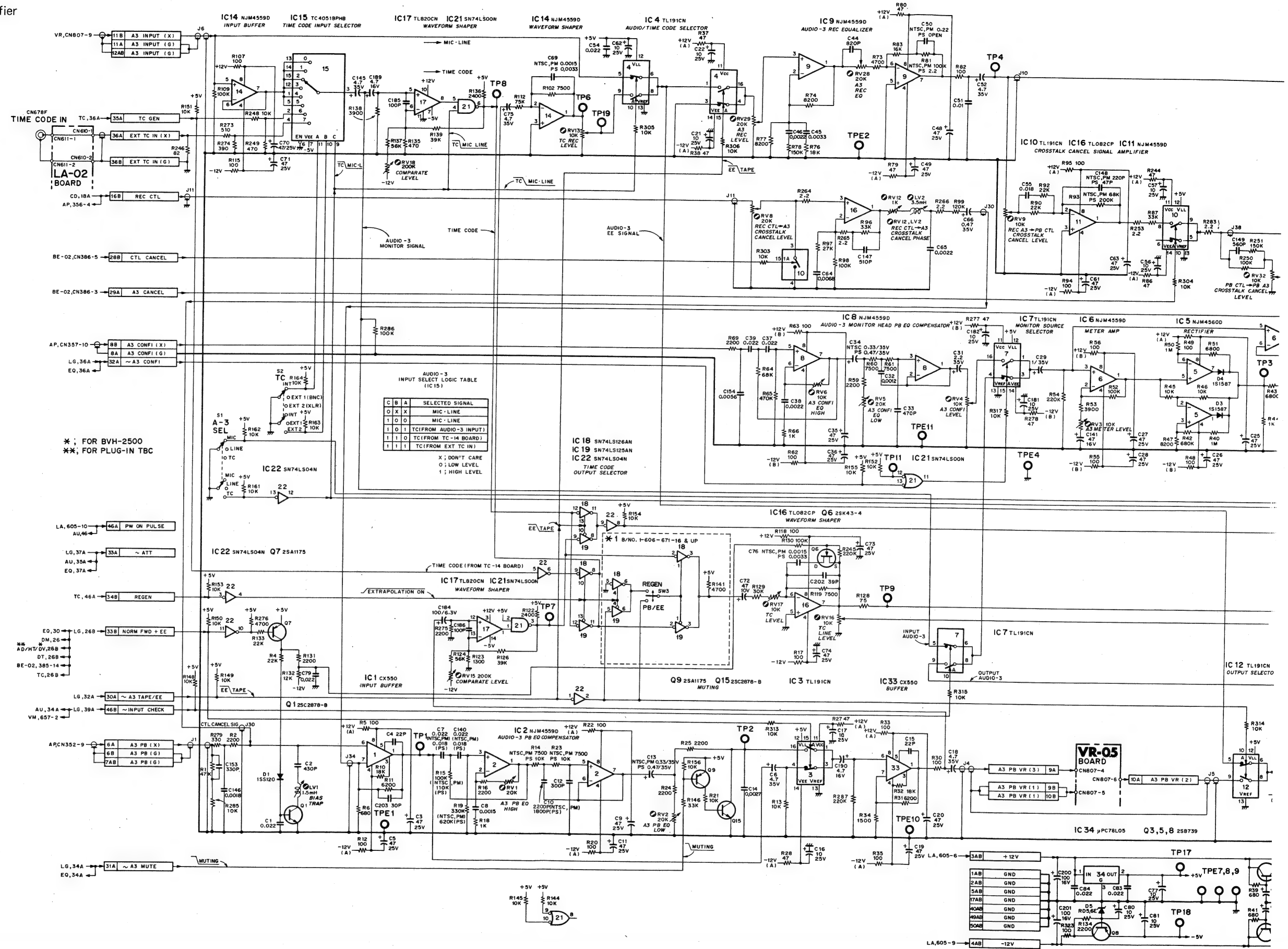
BVH-2000/PM
BVH-2180/PM
BVH-2000PS
BVH-2180PS
(00/10/02/12 MODEL)

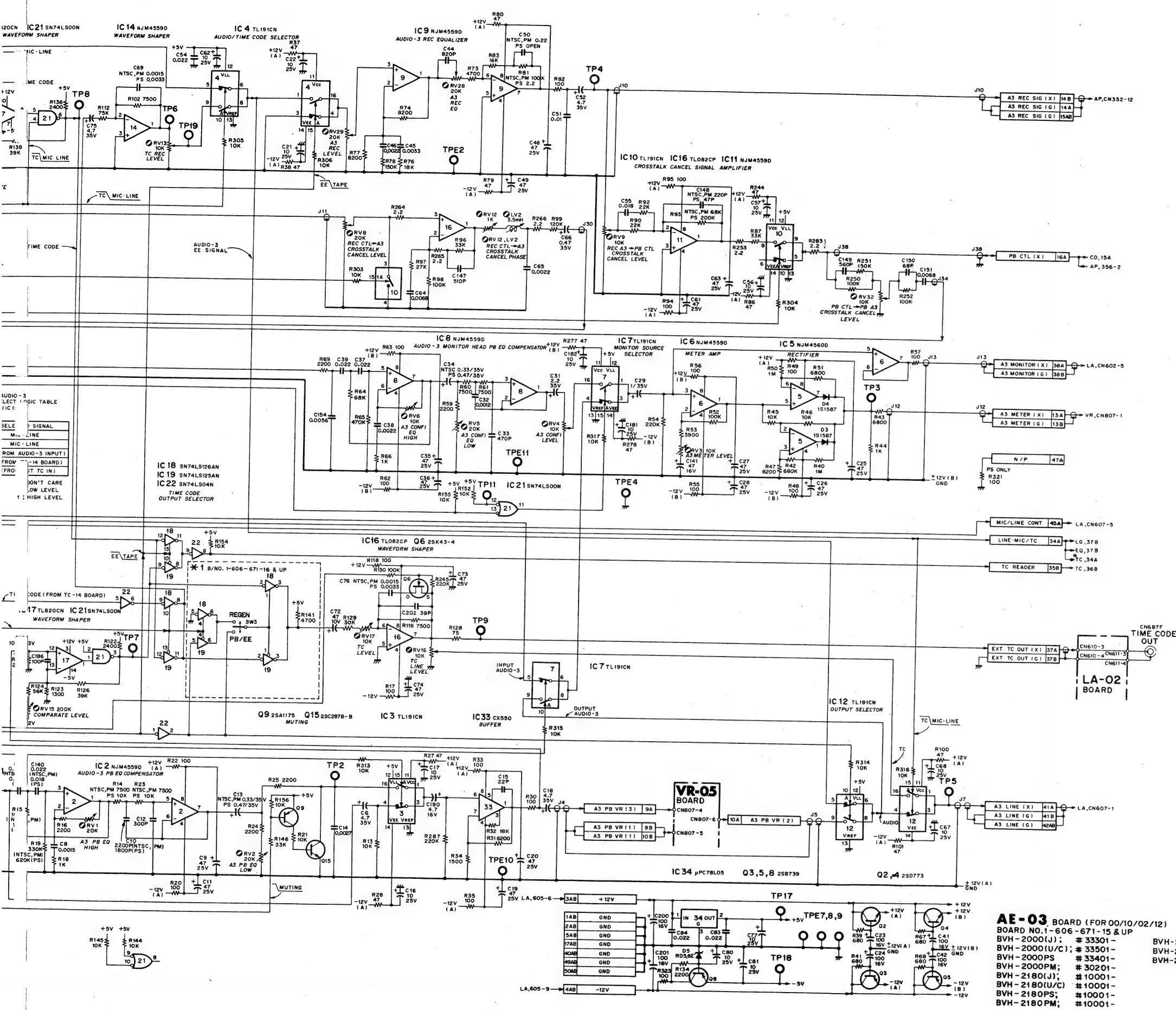
BVH-2500/P

D1	1A	RV1	1B	RV1	1B
D3	1D	RV2	1C	RV2	1C
D4	1D	RV3	1D	RV3	1D
D5	3E	RV4	1E	RV4	1E
IC1	1B	RV5	1E	RV5	1E
IC2	1C	RV6	1E	RV6	1E
IC3	1C	RV7	1E	RV7	1E
IC4	2A	RV8	3C	RV8	3C
IC5	1D	RV9	2B	RV9	2B
IC6	1D	RV10	3C	RV10	3C
IC7	1E	RV11	3C	RV11	3C
IC8	1E	RV12	3C	RV12	3C
IC9	2B	RV13	2D	RV13	2D
IC10	2C	RV14	2E	RV14	2E
IC11	2B	RV15	2E	RV15	2E
IC12	2D	RV16	2E	RV16	2E
IC13	2D	RV17	2E	RV17	2E
IC14	2D	RV18	2E	RV18	2E
IC15	2E	RV19	2E	RV19	2E
IC16	3D	RV20	2E	RV20	2E
IC17	2E	RV21	2E	RV21	2E
IC18	3E	RV22	2E	RV22	2E
IC19	3E	RV23	2E	RV23	2E
IC20	2F	RV24	2E	RV24	2E
IC21	2F	RV25	2E	RV25	2E
IC22	3F	RV26	2E	RV26	2E
IC23	3F	RV27	2E	RV27	2E
IC24	3F	RV28	2E	RV28	2E
IC25	3F	RV29	2E	RV29	2E
IC26	3F	RV30	2E	RV30	2E
IC27	3F	RV31	2E	RV31	2E
IC28	3F	RV32	2E	RV32	2E
IC29	3F	RV33	2E	RV33	2E
IC30	3F	RV34	2E	RV34	2E
IC31	3F	RV35	2E	RV35	2E
IC32	3F	RV36	2E	RV36	2E
IC33	3F	RV37	2E	RV37	2E
IC34	3F	RV38	2E	RV38	2E
LV1	1B	RV39	2E	RV39	2E
LV2	3C	RV40	2E	RV40	2E
LV3	3C	RV41	2E	RV41	2E
LV4	4A	RV42	2E	RV42	2E
Q1	1B	RV43	2E	RV43	2E
Q2	1D	RV44	2E	RV44	2E
Q3	1D	RV45	2E	RV45	2E
Q4	1F	RV46	2E	RV46	2E
Q5	1F	RV47	2E	RV47	2E
Q6	3D	RV48	2E	RV48	2E
Q7	3D	RV49	2E	RV49	2E
Q8	3E	RV50	2E	RV50	2E
Q9	3E	RV51	2E	RV51	2E
Q10	3E	RV52	2E	RV52	2E
Q11	3E	RV53	2E	RV53	2E
Q12	3E	RV54	2E	RV54	2E
Q13	3E	RV55	2E	RV55	2E
Q14	3E	RV56	2E	RV56	2E
Q15	3E	RV57	2E	RV57	2E
Q16	3E	RV58	2E	RV58	2E
Q17	3E	RV59	2E	RV59	2E
Q18	3E	RV60	2E	RV60	2E
Q19	3E	RV61	2E	RV61	2E
Q20	3E	RV62	2E	RV62	2E
Q21	3E	RV63	2E	RV63	2E
Q22	3E	RV64	2E	RV64	2E
Q23	3E	RV65	2E	RV65	2E
Q24	3E	RV66	2E	RV66	2E
Q25	3E	RV67	2E	RV67	2E
Q26	3E	RV68	2E	RV68	2E
Q27	3E	RV69	2E	RV69	2E
Q28	3E	RV70	2E	RV70	2E
Q29	3E	RV71	2E	RV71	2E
Q30	3E	RV72	2E	RV72	2E
Q31	3E	RV73	2E	RV73	2E
Q32	3E	RV74	2E	RV74	2E
Q33	3E	RV75	2E	RV75	2E
Q34	3E	RV76	2E	RV76	2E
Q35	3E	RV77	2E	RV77	2E
Q36	3E	RV78	2E	RV78	2E
Q37	3E	RV79	2E	RV79	2E
Q38	3E	RV80	2E	RV80	2E
Q39	3E	RV81	2E	RV81	2E
Q40	3E	RV82	2E	RV82	2E
Q41	3E	RV83	2E	RV83	2E
Q42	3E	RV84	2E	RV84	2E
Q43	3E	RV85	2E	RV85	2E
Q44	3E	RV86	2E	RV86	2E
Q45	3E	RV87	2E	RV87	2E
Q46	3E	RV88	2E	RV88	2E
Q47	3E	RV89	2E	RV89	2E
Q48	3E	RV90	2E	RV90	2E
Q49	3E	RV91	2E	RV91	2E
Q50	3E	RV92	2E	RV92	2E
Q51	3E	RV93	2E	RV93	2E
Q52	3E	RV94	2E	RV94	2E
Q53	3E	RV95	2E	RV95	2E
Q54	3E	RV96	2E	RV96	2E
Q55	3E	RV97	2E	RV97	2E
Q56	3E	RV98	2E	RV98	2E
Q57	3E	RV99	2E	RV99	2E
Q58	3E	RV100	2E	RV100	2E
Q59	3E	RV101	2E	RV101	2E
Q60	3E	RV102	2E	RV102	2E
Q61	3E	RV103	2E	RV103	2E
Q62	3E	RV104	2E	RV104	2E
Q63	3E	RV105	2E	RV105	2E
Q64	3E	RV106	2E	RV106	2E
Q65	3E	RV107	2E	RV107	2E
Q66	3E	RV108	2E	RV108	2E
Q67	3E	RV109	2E	RV109	2E
Q68	3E	RV110	2E	RV110	2E
Q69	3E	RV111	2E	RV111	2E
Q70	3E	RV112	2E	RV112	2E
Q71	3E	RV113	2E	RV113	2E
Q72	3E	RV114	2E	RV114	2E
Q73	3E	RV115	2E	RV115	2E
Q74	3E	RV116	2E	RV116	2E
Q75	3E	RV117	2E	RV117	2E
Q76	3E	RV118	2E	RV118	2E
Q77	3E	RV119	2E	RV119	2E
Q78	3E	RV120	2E	RV120	2E
Q79	3E	RV121	2E	RV121	2E
Q80	3E	RV122	2E	RV122	2E
Q81	3E	RV123	2E	RV123	2E
Q82	3E	RV124	2E	RV124	2E
Q83	3E	RV125	2E	RV125	2E
Q84	3E	RV126	2E	RV126	2E
Q85	3E	RV127	2E	RV127	2E
Q86	3E	RV128	2E	RV128	2E
Q87	3E	RV129	2E	RV129	2E
Q88	3E	RV130	2E	RV130	2E
Q89	3E	RV131	2E	RV131	2E
Q90	3E	RV132	2E	RV132	2E
Q91	3E	RV133	2E	RV133	2E
Q92	3E	RV134	2E	RV134	2E
Q93	3E	RV135	2E	RV135	2E
Q94	3E	RV136	2E	RV136	2E
Q95	3E	RV137	2E	RV137	2E
Q96	3E	RV138	2E	RV138	2E
Q97	3E	RV139	2E	RV139	2E
Q98	3E	RV140	2E	RV140	2E
Q99	3E	RV141	2E	RV141	2E
Q100	3E	RV142	2E	RV142	2E
Q101	3E	RV143	2E	RV143	2E
Q102	3E	RV144	2E	RV144	2E
Q103	3E	RV145	2E	RV145	2E
Q104	3E	RV146	2E	RV146	2E
Q105	3E	RV147	2E	RV147	2E
Q106	3E	RV148	2E	RV148	2E
Q107	3E	RV149	2E	RV149	2E
Q108	3E	RV150	2E	RV150	2E
Q109	3E	RV151	2E	RV151	2E
Q110	3E	RV152	2E	RV152	2E
Q111	3E	RV153	2E	RV153	2E
Q112	3E	RV154	2E	RV154	2E
Q113	3E	RV155	2E	RV155	2E
Q114	3E	RV156	2E	RV156	2E
Q115	3E	RV157	2E	RV157	2E
Q116	3E	RV158	2E	RV158	2E
Q117	3E	RV159	2E	RV159	2E
Q118	3E	RV160	2E	RV160	2E
Q119	3E	RV161	2E	RV161	2E
Q120	3E	RV162	2E	RV162	2E
Q121	3E	RV163	2E	RV163	2E
Q122	3E	RV164	2E	RV164	2E
Q123	3E	RV165	2E	RV165	2E
Q124	3E	RV166	2E	RV166	2E
Q125	3E	RV167	2E	RV167	2E
Q126	3E	RV168	2E	RV168	2E
Q127	3E	RV169	2E	RV169	2E
Q128	3E	RV170	2E	RV170	2E
Q129	3E	RV171	2E	RV171	2E
Q130	3E	RV172	2E	RV172	2E
Q131	3E	RV173	2E	RV173	2E
Q132	3E	RV174	2E	RV174	2E
Q133	3E	RV175	2E	RV175	2E
Q134	3E	RV176	2E	RV176	2E
Q135	3E	RV177	2E	RV177	2E
Q136	3E	RV178	2E	RV178	2E
Q137	3E	RV179	2E	RV179	2E
Q138	3E	RV180	2E	RV180	2E
Q139	3E	RV181	2E	RV181	2E
Q140	3E	RV182	2E	RV182	2E
Q141	3E	RV183	2E	RV183	2E
Q142	3E	RV184	2E	RV184	2E
Q143	3E	RV185	2E	RV185	2E
Q144	3E	RV186	2E	RV186	2E
Q145	3E	RV187	2E	RV187	2E
Q146	3E	RV188	2E	RV188	2E
Q147	3E	RV189	2E	RV189	2E
Q148	3E	RV190	2E	RV190	2E
Q149	3E	RV191	2E	RV191	2E
Q150	3E	RV192	2E	RV192	2E
Q151	3E	RV193	2E	RV193	2E
Q152	3E	RV194	2E	RV194	2E
Q153	3E	RV195	2E	RV195	2E
Q154	3E	RV196	2E	RV196	2E
Q155	3E	RV197	2E	RV197	2E
Q156	3E	RV198	2E	RV198	2E
Q157	3E	RV199	2E	RV199	2E
Q158	3E	RV200	2E	RV200	2E
Q159	3E	RV201	2E	RV201	2E
Q160	3E	RV202	2E	RV202	2E
Q161	3E	RV203	2E	RV203	2E
Q162	3E	RV204	2E	RV204	2E
Q163	3E	RV205	2E	RV205	2E
Q164	3E	RV206	2E	RV206	2E
Q165	3E	RV207	2E	RV207	2E
Q166	3E	RV208	2E	RV208	2E
Q167	3E	RV209	2E	RV209	2E
Q168	3E	RV210	2E	RV210	2E
Q169	3E	RV211	2E	RV211	2E
Q170	3E	RV212	2E	RV212	2E
Q171	3E	RV213	2E	RV213	2E
Q172	3E	RV214	2E	RV214	2E
Q173	3E	RV215	2E	RV215	2E
Q174	3E	RV216	2E	RV216	2E
Q175	3E	RV217	2E	RV217	2E
Q176	3E	RV218	2E	RV218	2E
Q177	3E	RV219	2E	RV219	2E
Q178	3E	RV220	2E	RV220	2E
Q179	3E	RV221	2E	RV221	2E
Q180	3E	RV222	2E	RV222	2E
Q181	3E	RV223	2E	RV223	2E
Q182	3E	RV224	2E	RV224	2E
Q183	3E	RV225	2E	RV225	2E

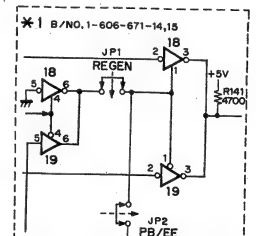
AE-03 BOARD

Audio-3 REC EQ/PB Amplifier

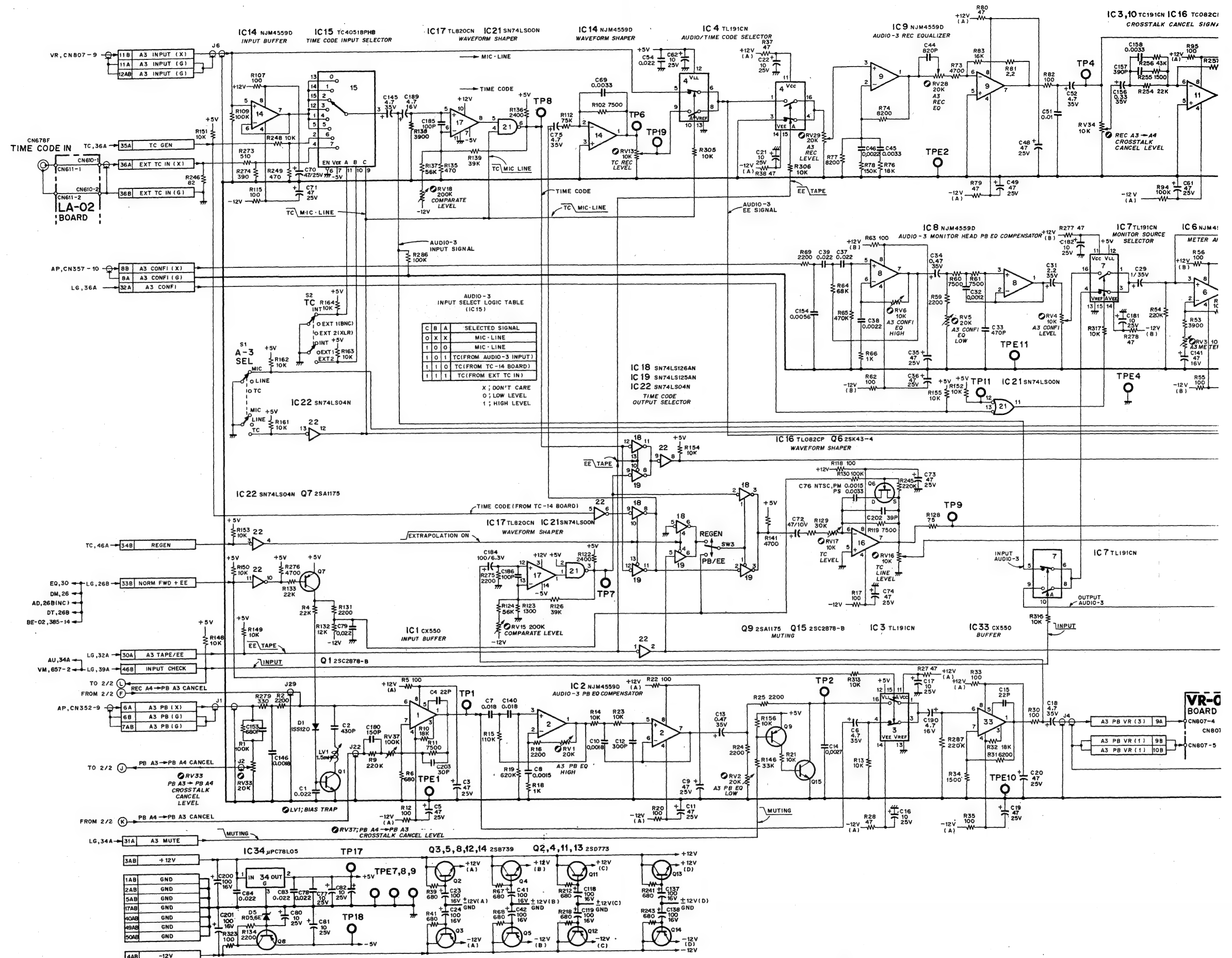




AE-03 BOARD (FOR 00/10/02/12)
BOARD NO.1-606-671-15 & UP
BVH-2000(J); #33301-
BVH-2000(U/C); #33501-
BVH-2000PS; #33401-
BVH-2000PM; #30201-
BVH-2180(J); #10001-
BVH-2180(U/C); #10001-
BVH-2180PS; #10001-
BVH-2180PM; #10001-
BVH-2500(J); #10001-
BVH-2500(U/C); #10001-
BVH-2500PS; #10001-
BVH-2500PM; #10001-



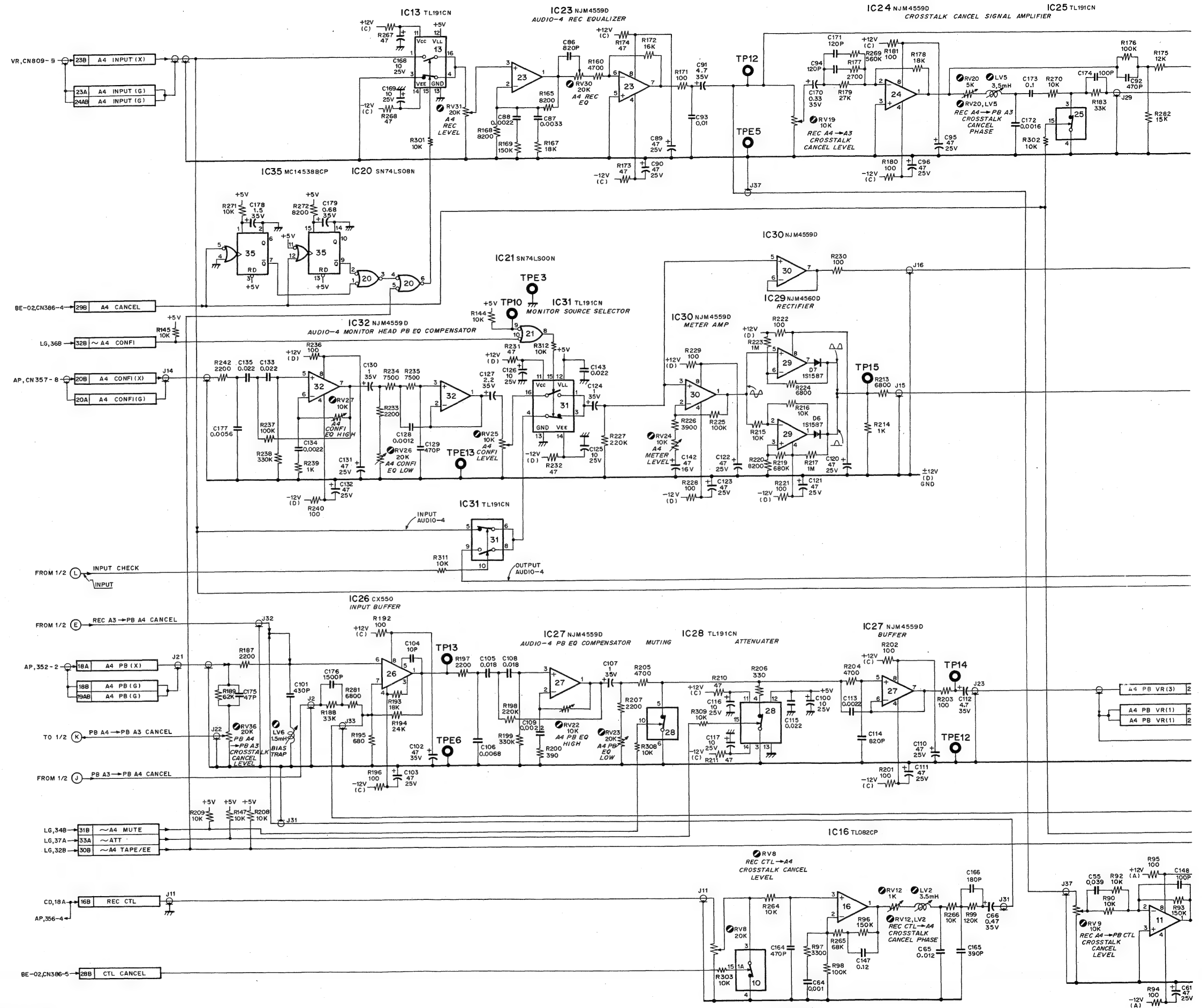
AE-03 BOARD (1/2); FOR 04 MODEL
Audio-3 REC EQ/PB Amplifier

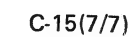




AE-03 BOARD (2/2); FOR 04/14 MODEL

Audio-4 REC EQ/PB Amplifier





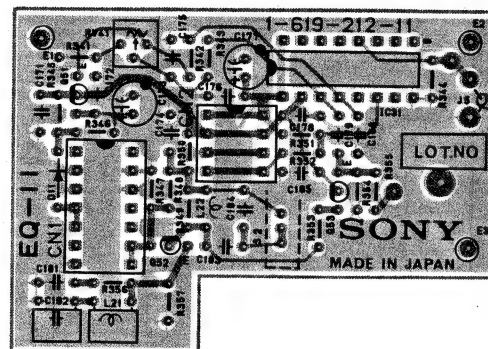
EQ-02 BOARD (1-606-659-15)

Component Side

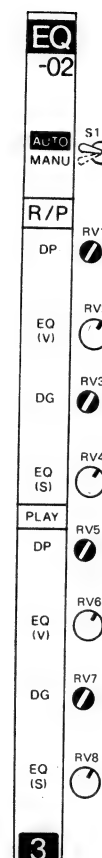
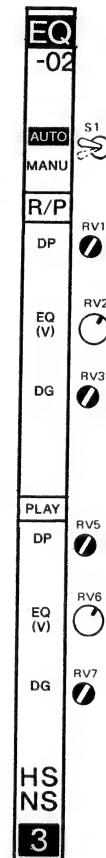
(For 10, 12, 14 MODEL)

EQ-11 BOARD (1-619-212-11)

Component Side



- 1-619-212-11 COMPONENT SIDE
- 1-619-212-11 SOLDER SIDE

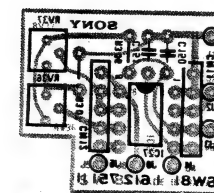


This board is used only with
EQ-02 older than
Part No. 1-606-659-15

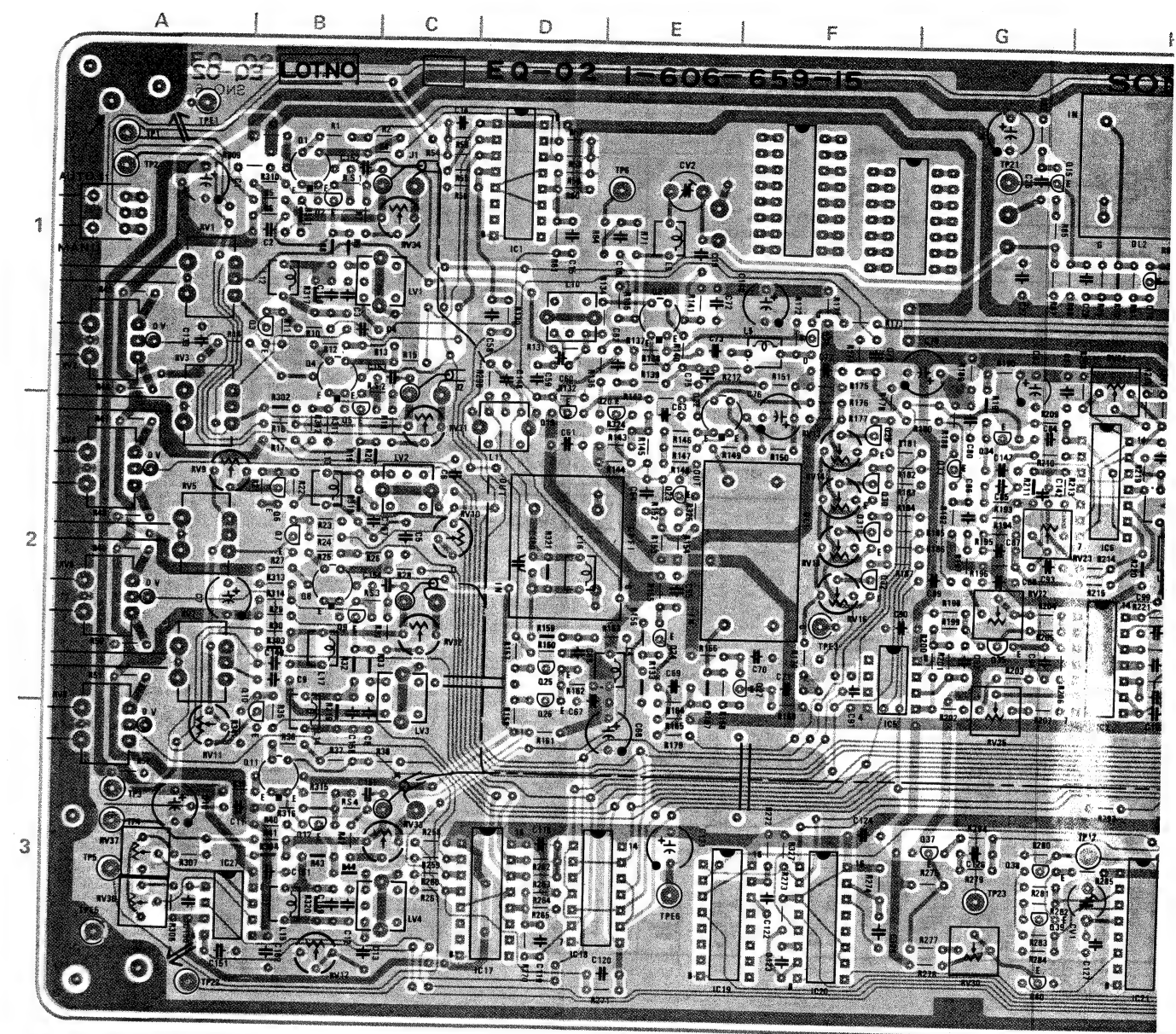
SW-81 BOARD (1-612-751-11)

Solder Side

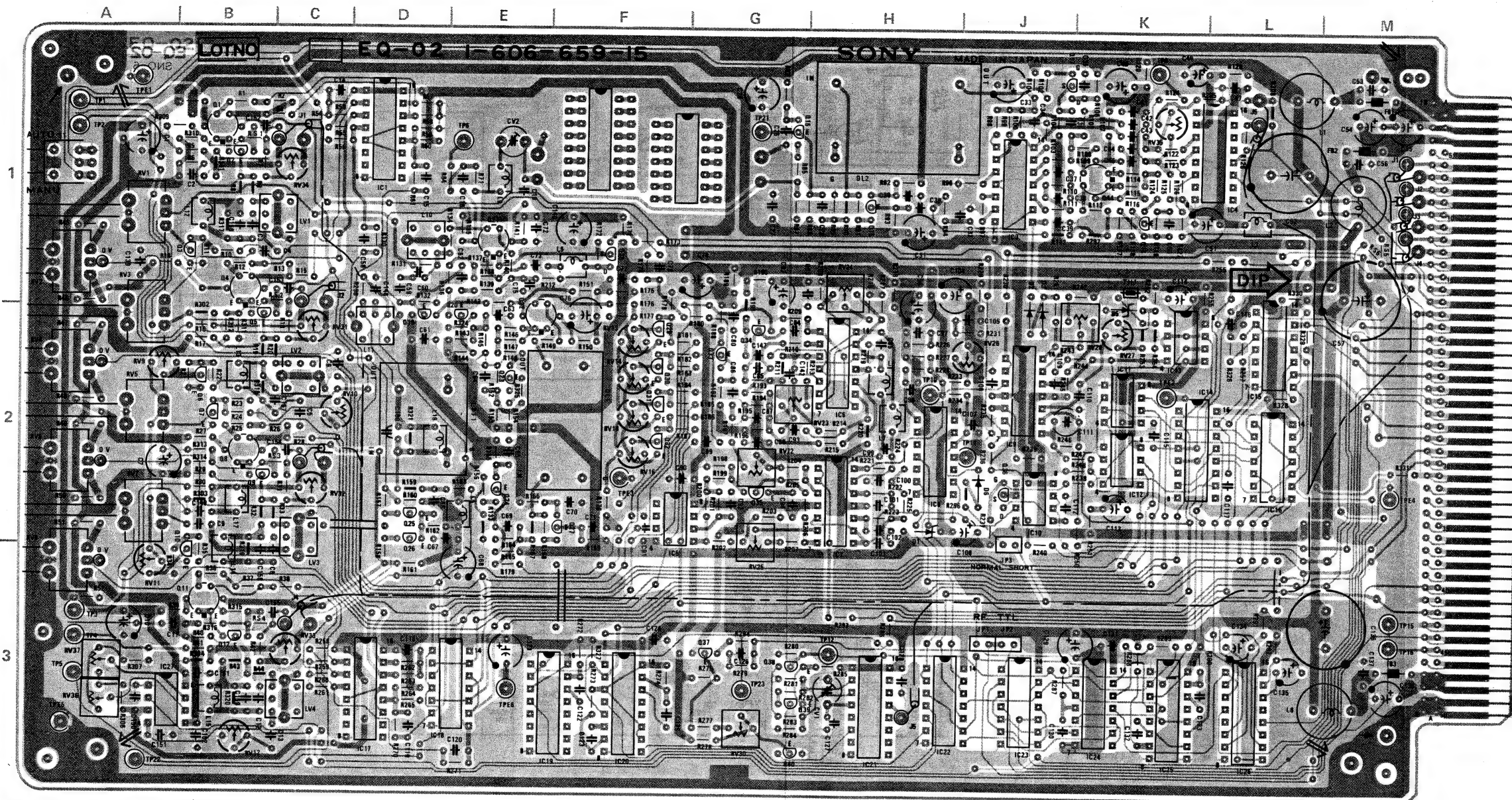
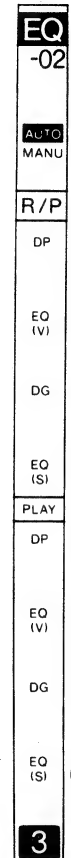
For PS



- 1-612-751-11
- SOLDER SIDE

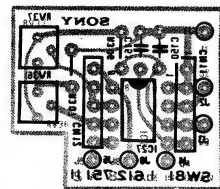


- 1-606-659-15 COMPONENT SIDE



1-606-659-15 COMPONENT SIDE

1-606-659-15 SOLDER SIDE

1-612-751-11
SOLDER SIDE

EQ-02 (1-606-659-15 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CV1 3H	Q30 2F
(NTSC, PM)	Q31 2F
CV2 1E	Q32 2F
	Q33 2G
	Q34 2G
D1 2H	Q35 2G
D2 2J	Q36 2J
D3 2J	Q37 3G
D5 2K	Q38 3G
D6 2J	Q39 3G
	Q40 3G
	Q41 1K
DL1 2F	RV1 1A
DL2 1H	RV2 1A
	RV3 2A
IC1 1D	RV4 2A
IC3 1J	RV5 2A
IC4 1L	RV6 2A
IC5 2F	RV7 2A
IC6 2H	RV8 3A
IC7 2H	RV9 2A
IC8 2H	RV10 2C
IC9 2J	RV11 3A
IC10 2J	RV12 3G
IC11 2K	RV13 2F
IC12 2K	RV14 2F
IC13 2K	RV15 2F
IC14 2L	RV16 2F
IC15 2L	RV17 2F
IC16 2L	RV18 2F
IC17 3D	RV19 2G
IC18 3D	RV20 2G
IC19 3E	RV21 1H
IC20 3F	RV22 2G
IC21 3H	RV23 2G
IC22 3H	RV24 1H
IC23 3J	RV25 2G
IC24 3K	RV26 2J
IC25 3K	RV27 2K
IC26 3L	RV28 2K
	RV29 3G
	RV30 3G
	RV31 2C
	RV32 2C
	RV33 3C
(PS/P)	RV34 1C
IC27 3B	RV35 1K
JP1 3J	(PS/P)
JP2 3J	RV36 3A
JP3 2J	RV37 3A
LV1 1C	S1 1A
LV2 2C	
LV3 2C	TH1 1K
LV4 3C	
	TP1 1A
01 1B	TP2 1A
02 1B	TP3 3A
03 1B	TP4 3A
04 1B	TP5 3A
05 2B	
06 2B	(NTSC, PM)
07 2B	TP6 1E
08 2B	
09 2B	TP8 1K
010 3B	TP10 2H
011 3B	TP11 2J
012 3B	TP12 3H
013 1G	TP13 3H
014 1H	TP14 3H
015 1H	TP15 3H
016 1H	TP16 3H
017 1J	TP17 1G
018 1K	TP18 3A
019 2D	TP19 3G
020 2E	
021 1E	TPE1 1A
022 2E	TPE2 2K
023 2E	TPE3 2F
024 2E	TPE4 2M
025 2D	TPE5 3A
026 2D	TPE6 3E
027 2E	
028 1F	
029 2F	

C-18

C-17

C-16

VH-2000/PS/PM
VH-2180/PS/PM

C-18

C-17

C-16

BVH-2500/P

C-17

C-18

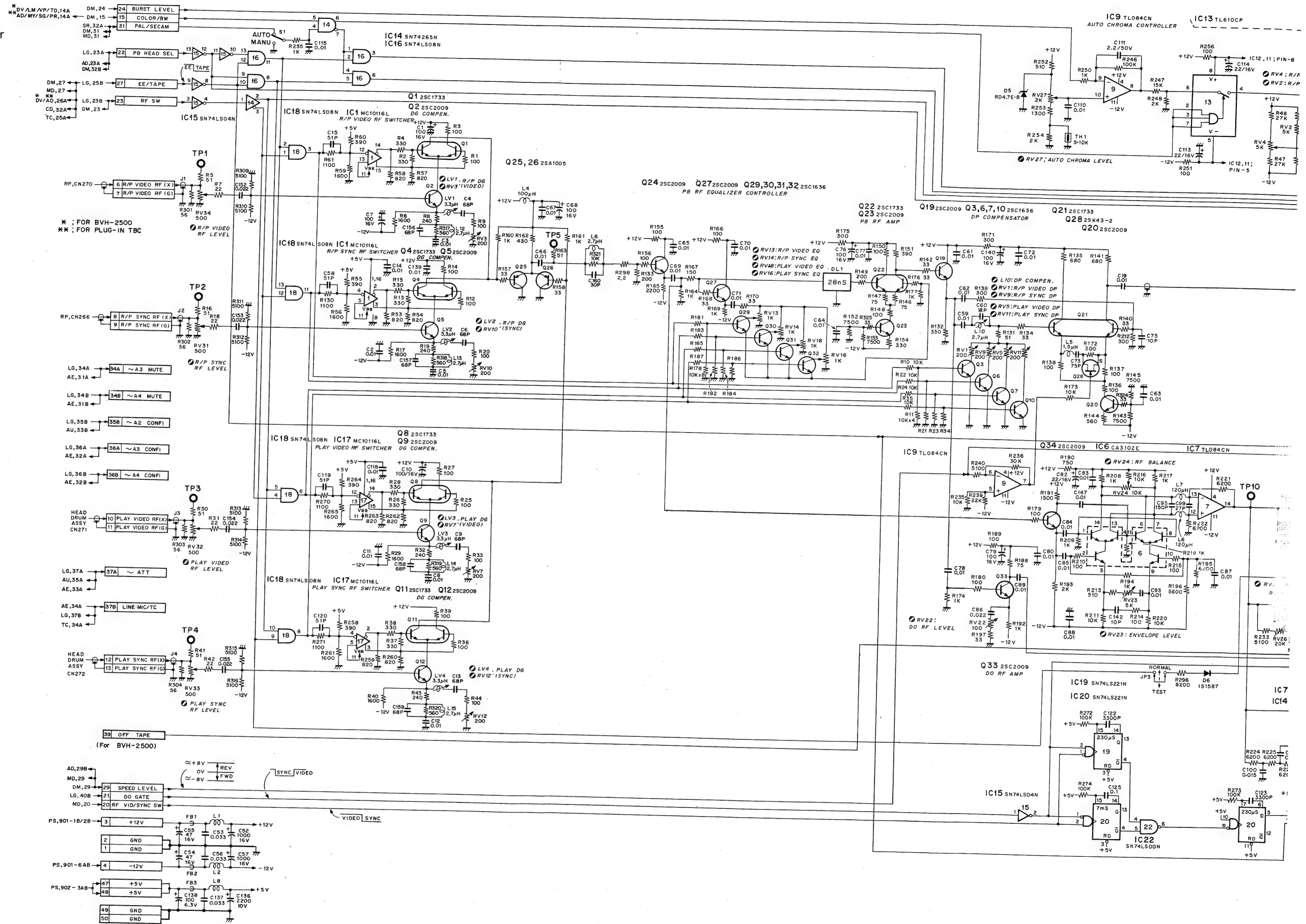
2000PS; #22301 - 34699 1-606-659-14, 15
2180PS; #10001 - 10599
2500P; #10001 - 10699

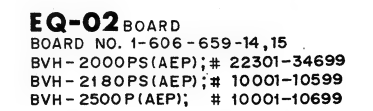
CARD RACK EQ-02

EQ-02 CARD RACK

1-606-659-14, 15 2000PS; #22301 - 34699
2180PS; #10001 - 10599
2500P; #10001 - 10699

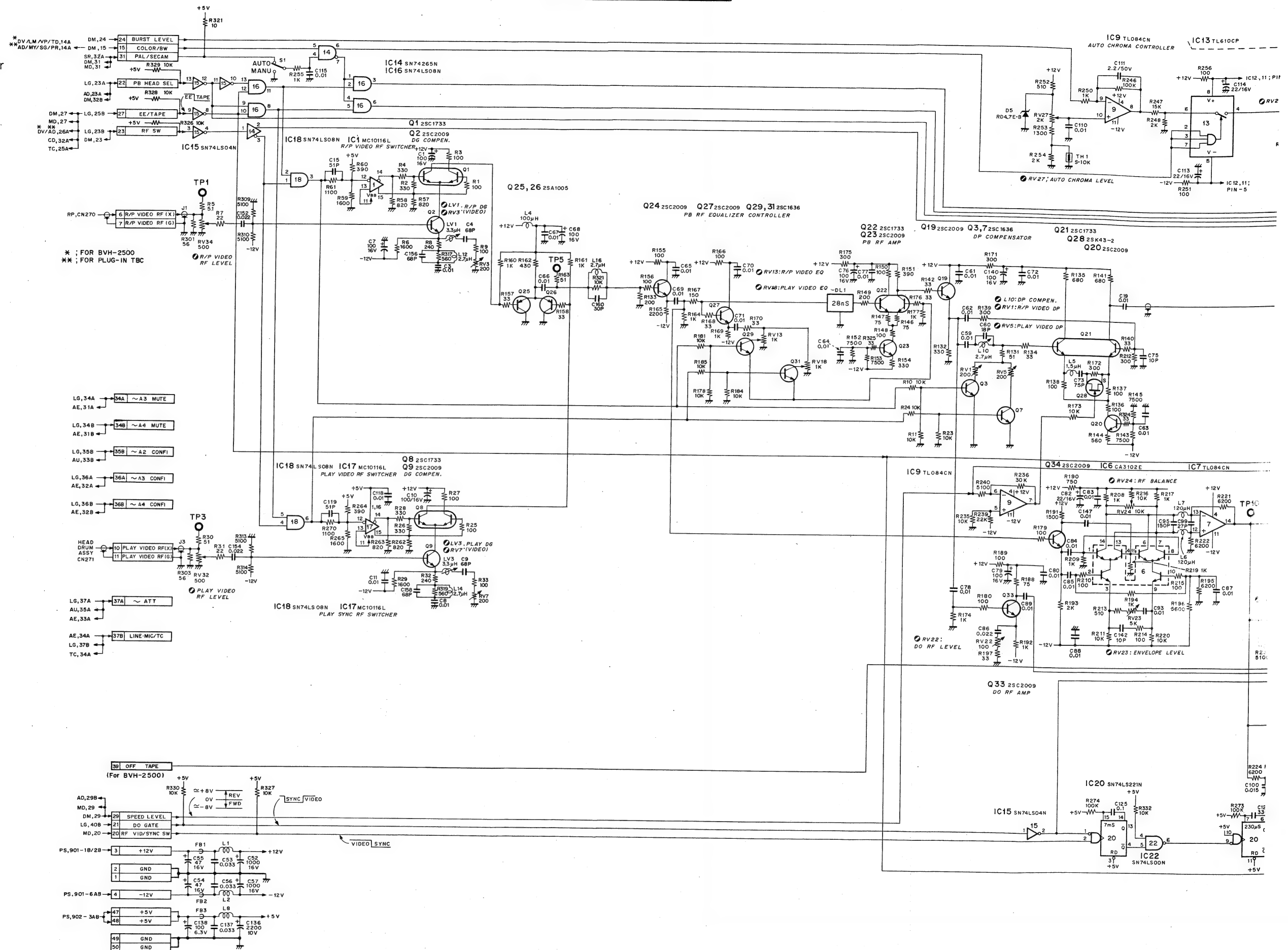
EQ-02 BOARD
Video/Sync PB Equalizer





EQ-02 BOARD

Video/Sync PB Equalizer

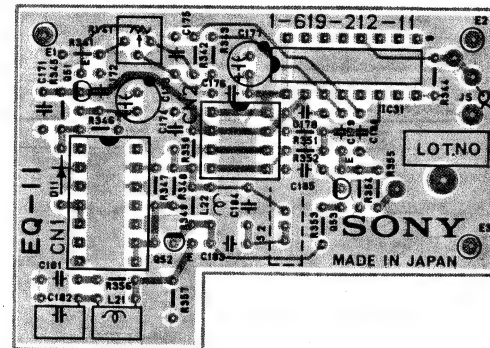


EQ-02 BOARD (1-606-659-17)

Component Side

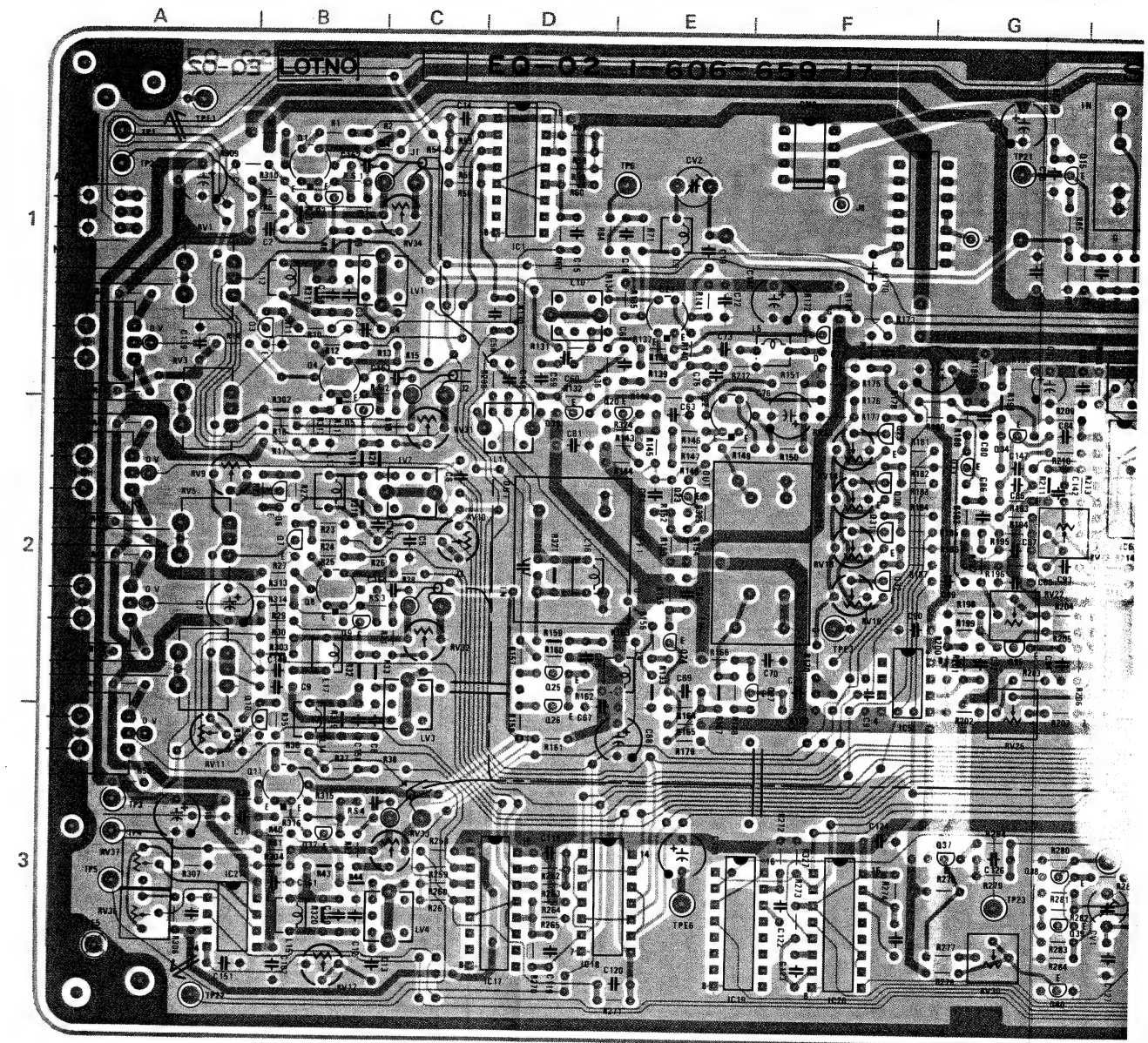
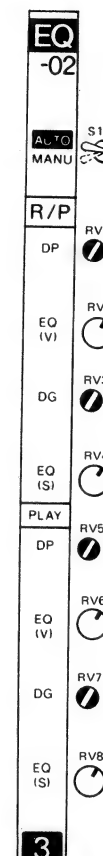
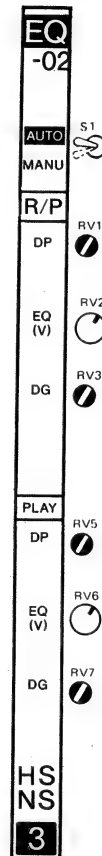
EQ-11 BOARD (1-619-212-11)

Component Side



- 1-619-212-11 COMPONENT SIDE
- 1-619-212-11 SOLDER SIDE

(For 10, 12, 14 MODEL)



■ 1-606-659-17 COMPONENT SIDE

EQ-02

S1
MANU

R/P

DP RV1

EQ (V) RV2

DG RV3

EQ (S) RV4

PLAY RV5

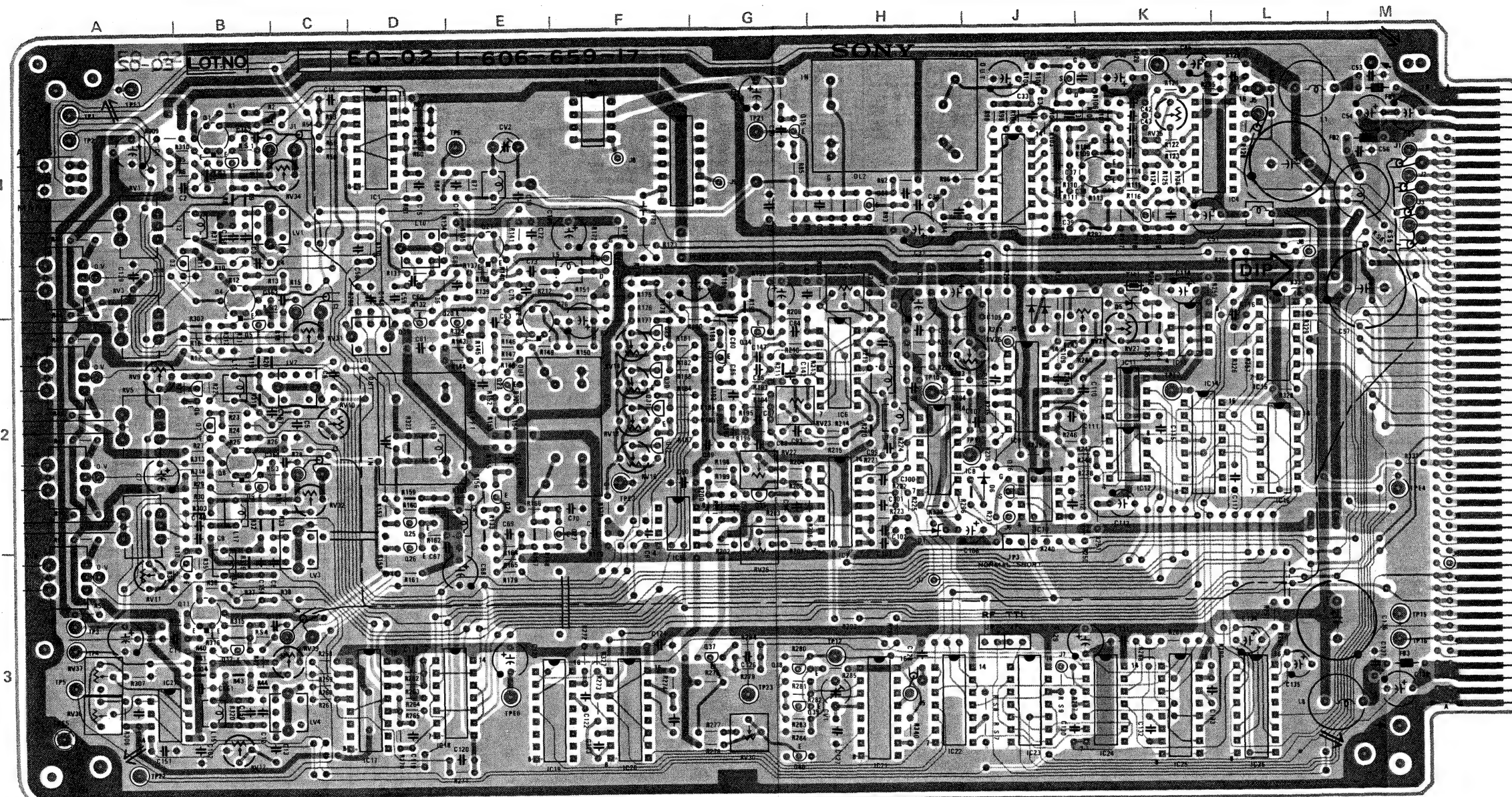
DP RV6

EQ (V) RV7

DG RV8

EQ (S) RV8

3



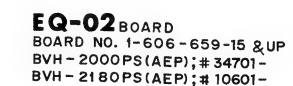
1-606-659-17 COMPONENT SIDE

1-606-659-17 SOLDER SIDE

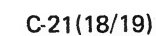
EQ-02 (1-606-659-16 & UP)

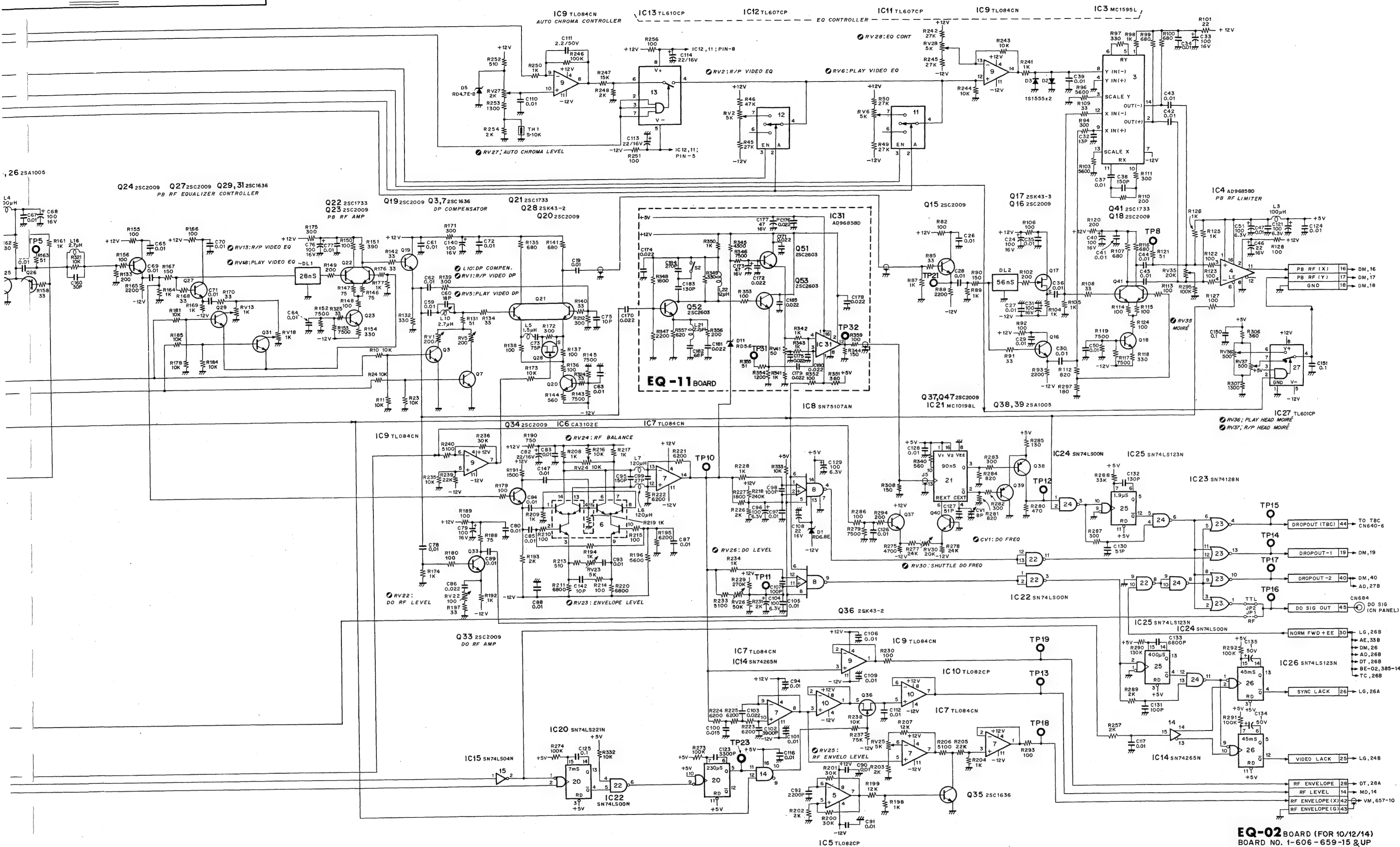
BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CV1	3H	Q30	2F
		Q31	2F
(NTSC,PM)		Q32	2F
CV2	1E	Q33	2G
		Q34	2G
D1	2H	Q35	2G
D2	2J	Q36	2J
D3	2J	Q37	3G
D5	2K	Q38	3G
D6	2J	Q39	3G
		Q40	3G
		Q41	1K
DL1	2F	RV1	1A
DL2	1H	RV2	1A
		RV3	2A
IC1	1D	RV4	2A
IC3	1J	RV5	2A
IC4	1L	RV6	2A
IC5	2F	RV7	2A
IC6	2H	RV8	3A
IC7	2H	RV9	2A
IC8	2H	RV10	2C
IC9	2J	RV11	3A
IC10	2J	RV12	3B
IC11	2K	RV13	2F
IC12	2K	RV14	2F
IC13	2K	RV15	2F
IC14	2L	RV16	2F
IC15	2L	RV17	2F
IC16	2L	RV18	2F
IC17	3D	RV19	2G
IC18	3D	RV20	2G
IC19	3E	RV21	1H
IC20	3F	RV22	2G
IC21	3H	RV23	2J
IC22	3H	RV24	2K
IC23	3J	RV25	2K
IC24	3K	RV26	3G
IC25	3K	RV27	3G
IC26	3L	RV28	3G
		RV29	3G
(PS/P)		RV30	3G
IC27	3B	RV31	2C
		RV32	2C
		RV33	3C
		RV34	1C
		RV35	1K
JP1	3J	(PS/P)	
JP2	3J	RV36	3A
JP3	2J	RV37	3A
LV1	1C	S1	1A
LV2	2C		
LV3	2C	TH1	1K
LV4	3C		
		TP1	1A
Q1	1B	TP2	1A
Q2	1B	TP3	3A
Q3	1B	TP4	3A
Q4	1B	TP5	3A
Q5	2B		
Q6	2B	(NTSC,PM)	
Q7	2B	TP6	1E
Q8	2B		
Q9	2B	TP8	1K
Q10	3B	TP10	2H
Q11	3B	TP11	2J
Q12	3B	TP12	3H
Q13	1G	TP13	3H
Q14	1H	TP14	3H
Q15	1H	TP15	3H
Q16	1H	TP16	3H
Q17	1J	TP17	1G
Q18	1K	TP18	3A
Q19	2D	TP19	3G
Q20	2E		
Q21	1E	TPE1	1A
Q22	2E	TPE2	2K
Q23	2E	TPE3	2F
Q24	2E	TPE4	3A
Q25	2D	TPE5	3A
Q26	2D	TPE6	3E
Q27	2E		
Q28	1F		
Q29	2F		



Video/Sync PB Equalizer





EQ-02 BOARD (FOR 10/12/14)
BOARD NO. 1-606-659-15 & UP
BVH-2000PS(AEP);# 34701-

CARD RACK DM-25

1-606-661-14

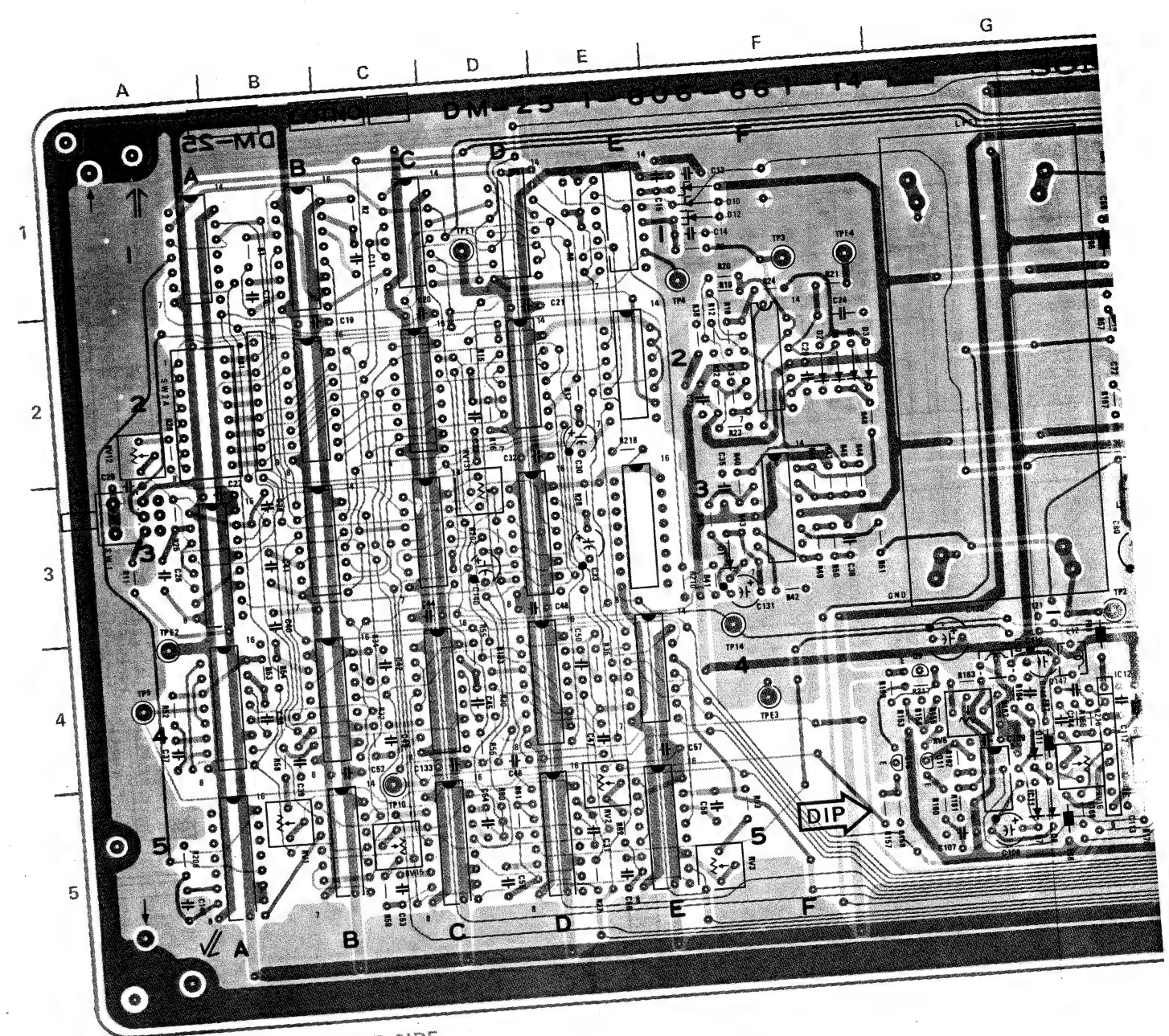
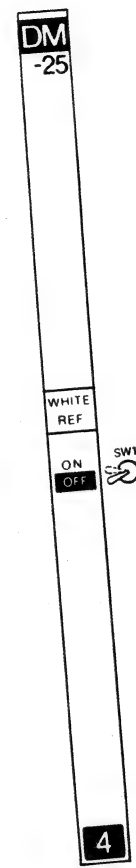
2000PS; #22301 - 33799
2180PS; #10001 - 10199
2500P; #10001 - 10599

2500(J); #10201 - 10999
2500(U/C); #10201 - 11599

DM-25 BOARD (1-606-661-14)
Component Side

2000PS; #22301 - 33799
2180PS; #10001 - 10199
2500P; #10001 - 10599
2500(J); #10201 - 10999
2500(U/C); #10201 - 11599
1-606-661-14

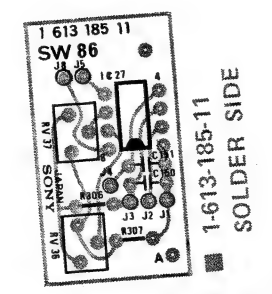
CARD RACK DM-25 DM



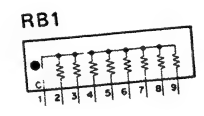
1-606-661-14 COMPONENT SIDE

SW-86 BOARD (1-613-185-11)
Component Side

For NTSC, PM



1-613-185-11
SOLDER SIDE



2000PS; #22301 - 33799 2500(J); #10201 - 10999 1-606-661-14
 2180PS; #10001 - 10199 2500(U/C); #10201 - 11599
 2500P; #10001 - 10599

CARD RACK DM-25

DM-25 CARD RACK

1-606-661-14

2000PS; #22301 - 33799
 2180PS; #10001 - 10199
 2500P; #10001 - 10599

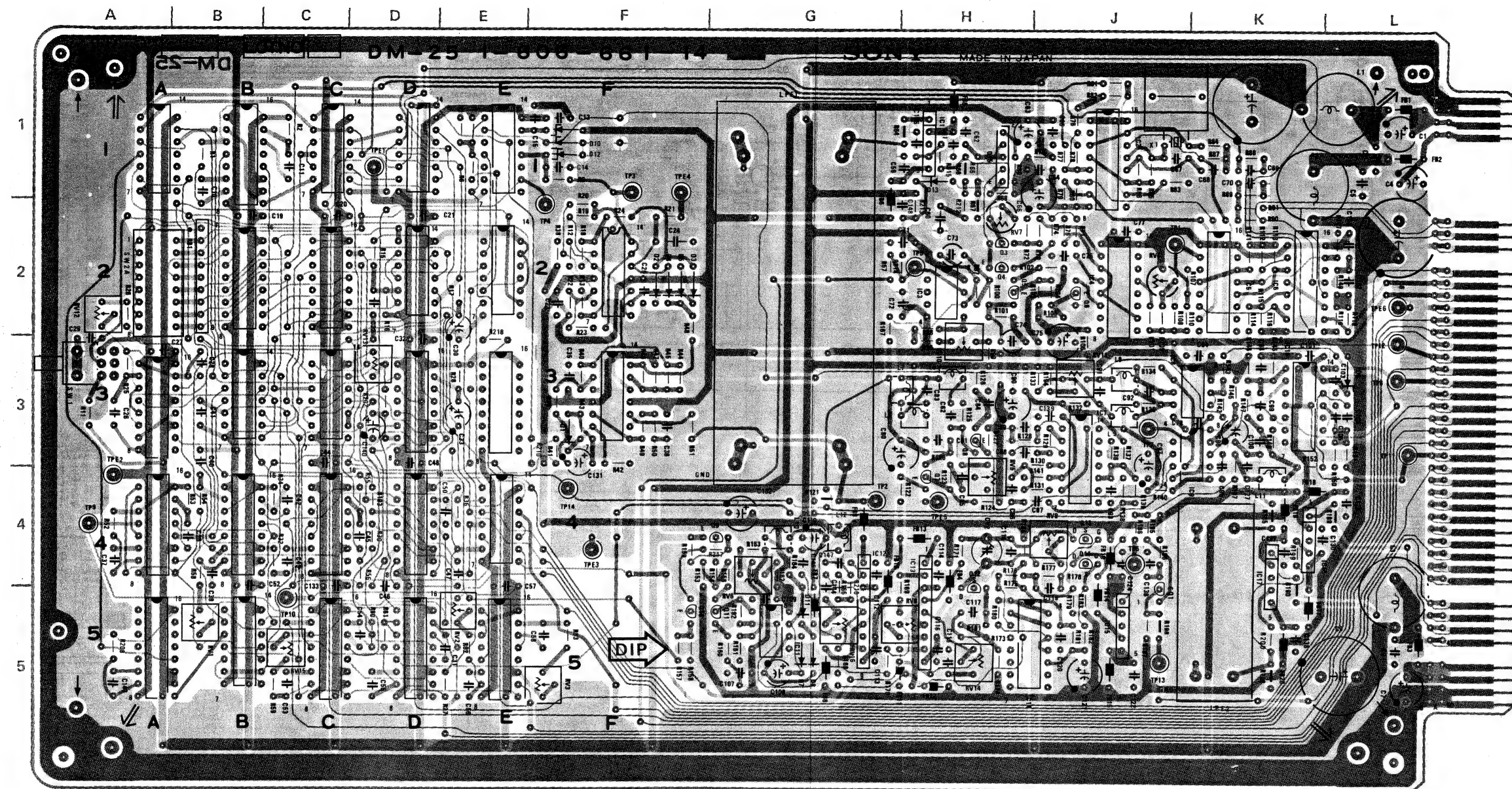
2500(J); #10201 - 10999
 2500(U/C); #10201 - 11599

DM-25

WHITE REF

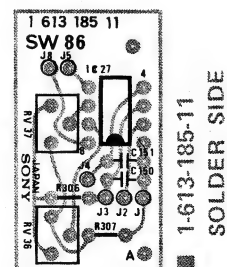
ON OFF

4

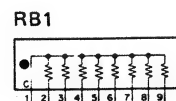


1-606-661-14 COMPONENT SIDE

1-606-661-14 SOLDER SIDE



1-613-185-11 SOLDER SIDE



DM-25 (1-606-661-14)

BVH-2000/PS/PM
 BVH-2180/PS/PM
 BVH-2500/P

CV2 4H	05 2H
D1 3F	06 2J
D2 2F	07 4H
D3 2F	08 3H
D4 2F	09 4G
D5 2F	010 5F
D6 3L	011 5G
D7 5G	012 4H
D8 5G	013 4J
D9 1F	014 4J
D10 1F	015 1H
D11 5G	RB1 2B
D12 1F	RV1 5B
D13 1H	RV2 5E
IC1 1H	RV3 5F
IC1A 1H	RV4 2J
IC1B 1H	RV5 4H
IC1C 1H	RV6 4G
IC1D 1H	RV7 2H
IC1E 1H	RV8 5H
IC2 1J	RV9 4J
IC2B 1H	RV10 3H
IC2C 1H	RV11 3J
IC2D 1H	RV12 2A
IC2E 1H	RV13 3D
IC3 2H	RV14 5H
IC3A 1H	RV15 5C
IC3B 1H	RV16 5G
IC3C 1H	RV17 2J
IC3D 1H	(SW-86 BOARD)
IC3F 1H	RV36 1A
IC4 2J	RV37 1A
IC4A 1H	SW1 3A
IC4B 1H	SW2A 1A
IC4C 1H	TP1 2J
IC4E 1H	TP2 4G
IC5 1H	TP3 1F
IC5A 1H	TP4 1H
IC5B 1H	TP5 2H
IC5C 1H	TP6 4J
IC5D 1H	TP7 3J
IC6 2K	TP8 3L
IC7 3J	TP9 4A
IC8 3K	TP10 5C
IC9 3K	TP11 3L
IC10 3K	TP12 3L
IC11 5G	TP13 5J
IC12 5G	TP14 4F
IC13 5H	(SW-86 BOARD)
IC14 5J	TPA 2A
IC15 5J	TPE1 1D
IC16 4K	TPE2 4A
IC17 4K	TPE3 4F
(SW-86 BOARD)	TPE4 1F
IC27 1A	TPE5 4H
01 4J	TPE6 2L
03 2H	X1 1J
04 2H	

BVH-2000/PS/PM
 BVH-2180/PS/PM

C-27(4/
 C-24

C-27(3/13)
 C-23

C-27(2/13)
 C-22

BVH-2500
 BVH-2500P

C-23

C-24

C-24

C-23

C-22

2000PS; #22301 - 33799
2180PS; #10001 - 10199
2500P; #10001 - 10599

2500(J); #10201 - 1-606-661-14
2500(U/C); #10201 -

CARD RACK DM-25

DM-25 CARD RACK

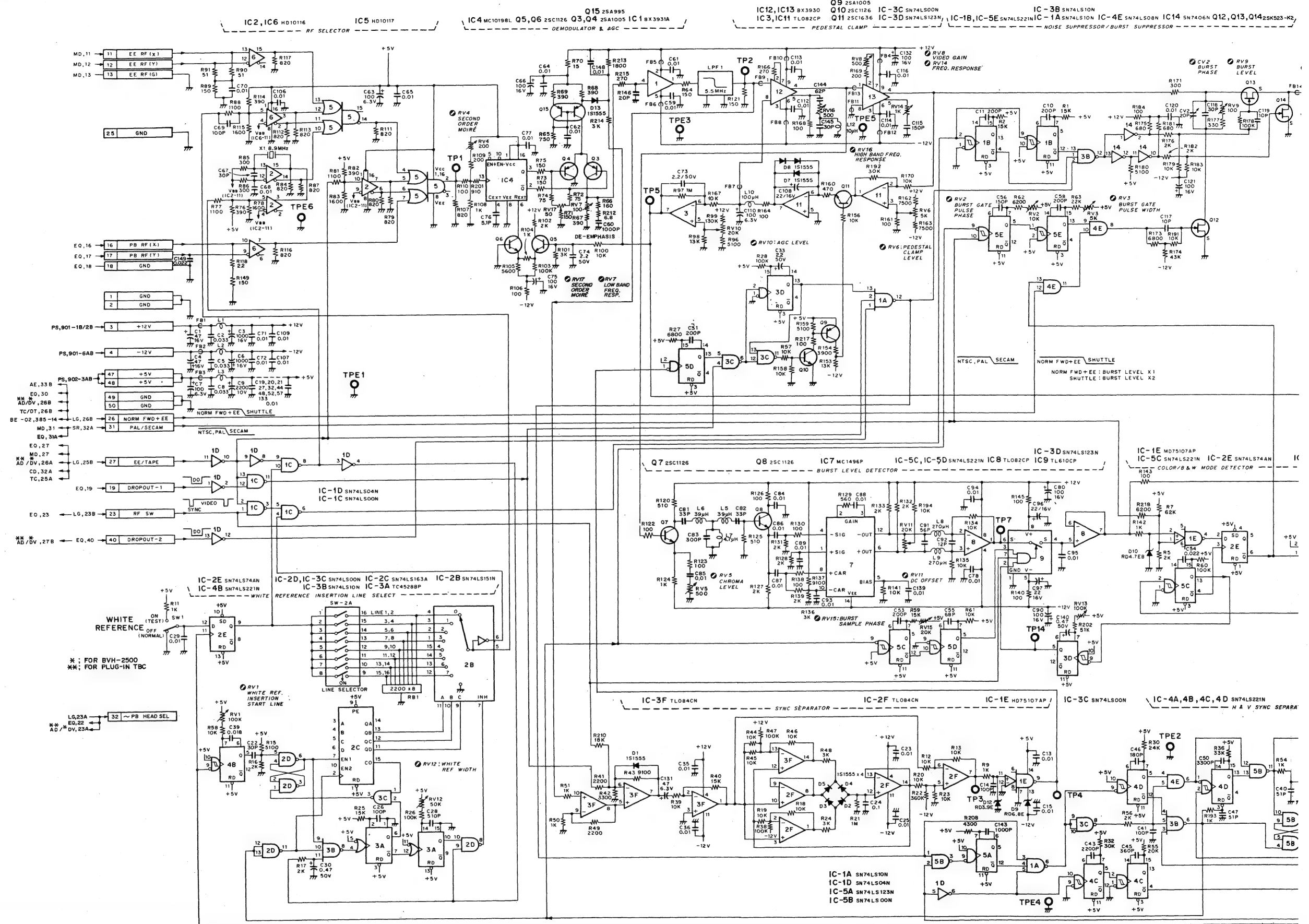
1-606-661-14

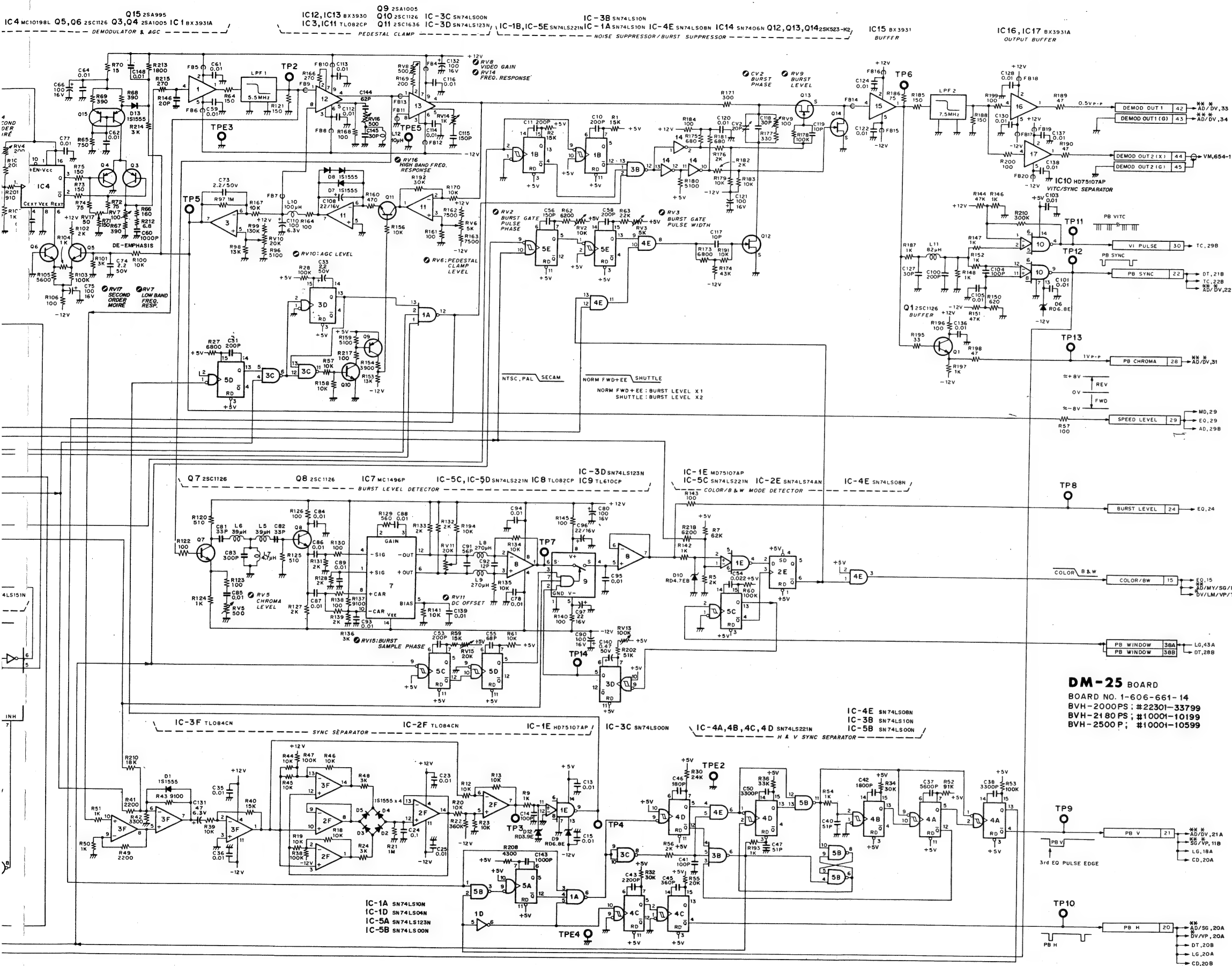
2000PS; #22301 - 33799
2180PS; #10001 - 10199
2500P; #10001 - 10599

2500(J); #10201 -
2500(U/C); #10201 -

DM-25 BOARD

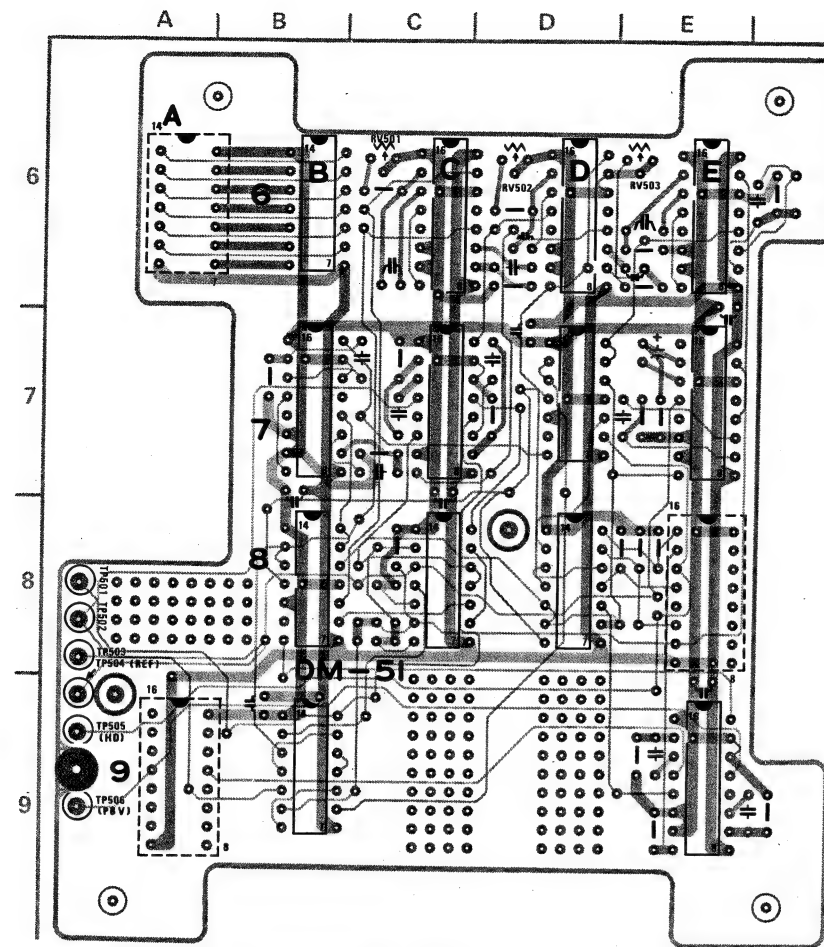
Video Demodulator





DM-51 BOARD (1-616-409-11)

Solder Side

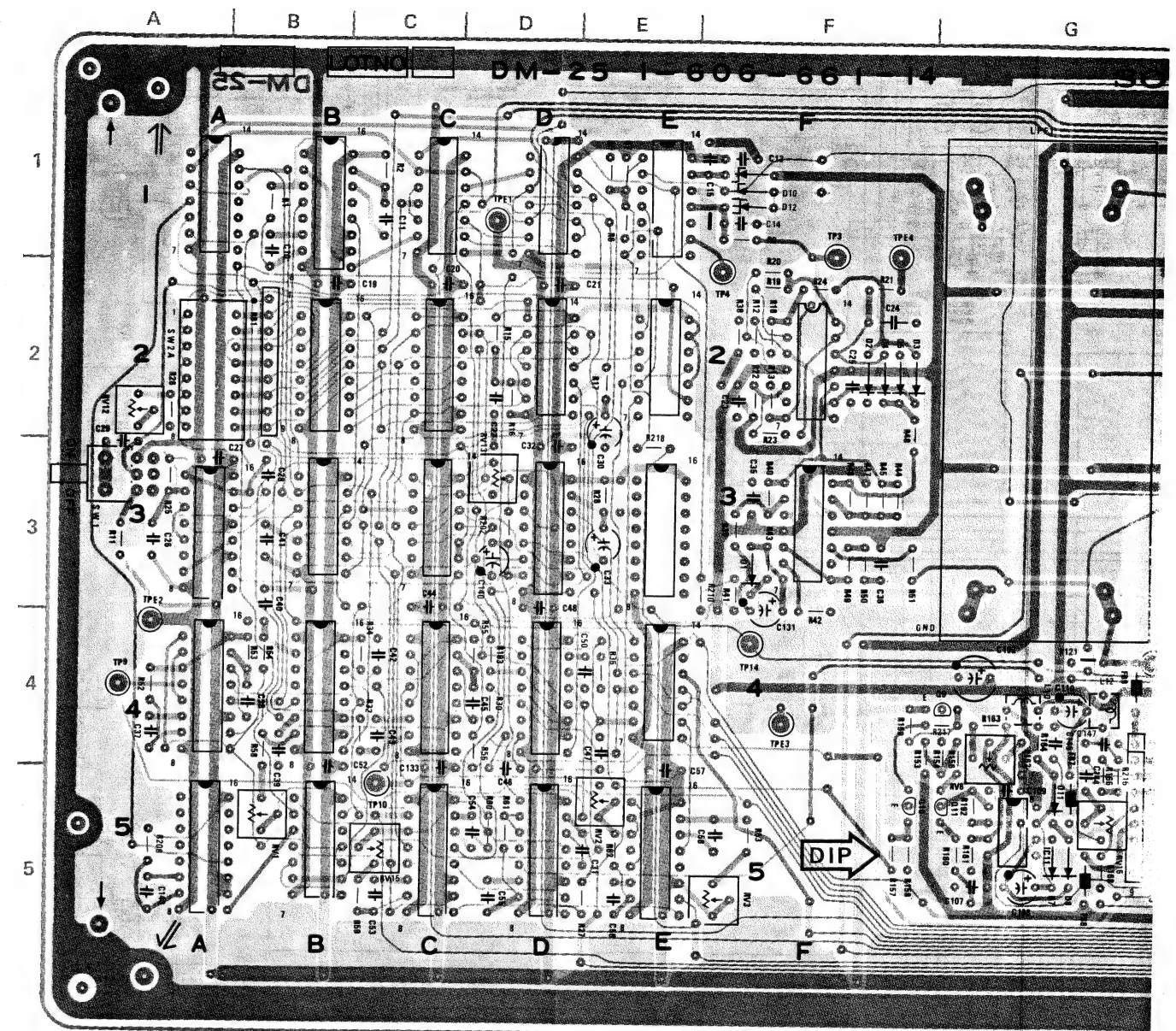


1-616-409-11 COMPONENT SIDE

1-616-409-11 SOLDER SIDE

DM-25 BOARD (1-606-661-14)

Component Side

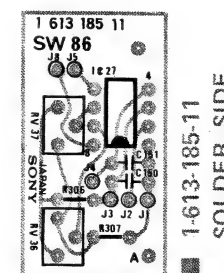


1-606-661-14 COMPONENT SIDE

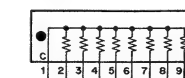
SW-86 BOARD (1-613-185-11)

Component Side

For NTSC, PM

1-613-185-11
SOLDER SIDE

RB1



2000PS; #33801 - 34399 1-606-661-14
2180PS; #10201 - 10599
2500P; #10601 - 10699

CARD RACK DM-25

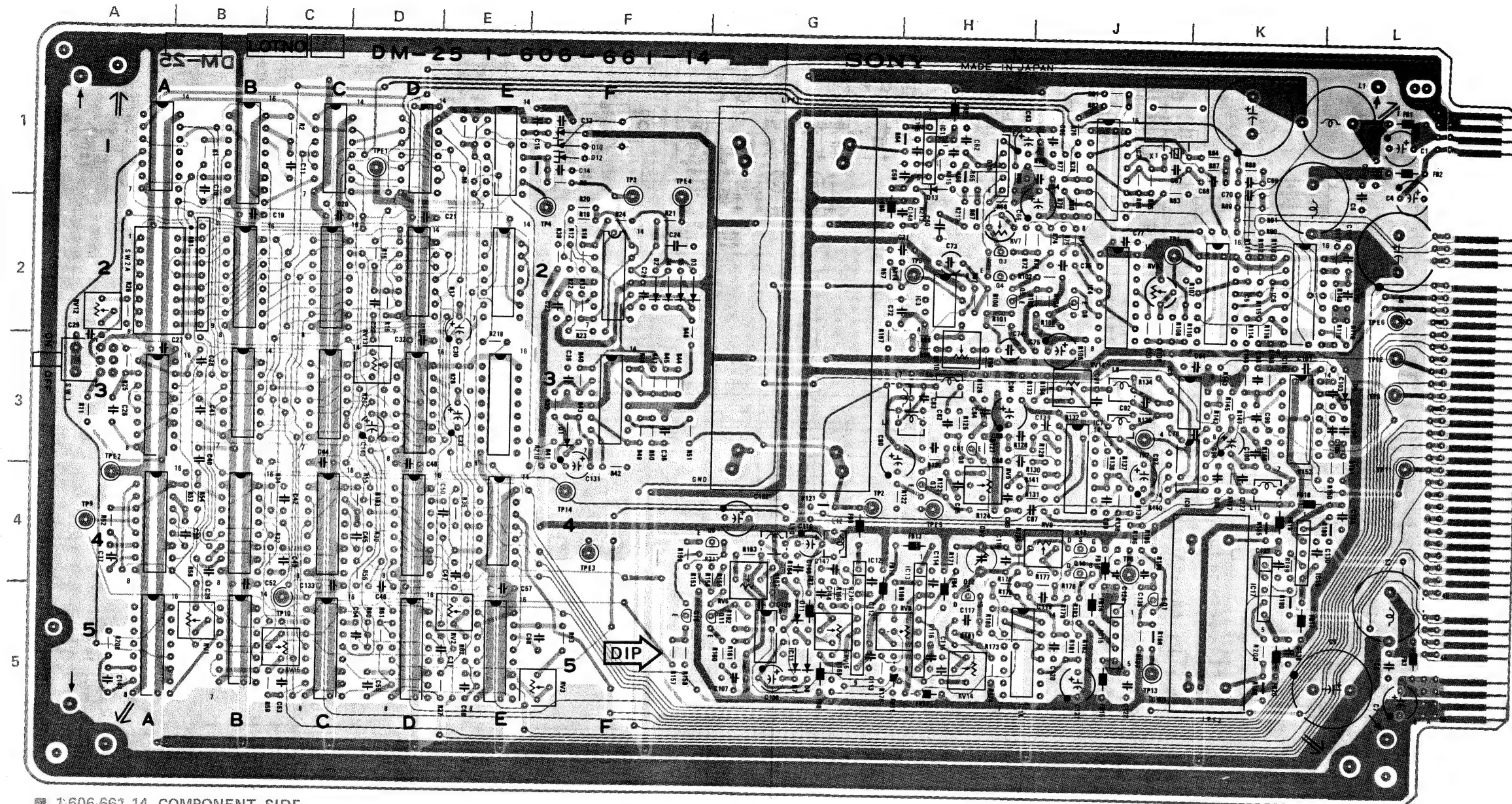
DM-25 CARD RACK

1-606-661-14 2000PS; #33801 - 34399
2180PS; #10201 - 10599
2500P; #10601 - 10699

BVH-2000PS

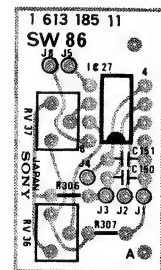
1-25 BOARD (1-606-661-14)

Component Side



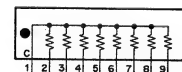
1-606-661-14 COMPONENT SIDE

1-606-661-14 SOLDER SIDE



1-613-185-11
SOLDER SIDE

RB1



C-27(3/13)

DM-25 (1-606-661-14)

BVH-2000PS
BVH-2180PS
BVH-2500P

CV2	4H	Q5	2H
D1	3F	Q6	2J
D2	2F	Q7	4H
D3	2F	Q8	3H
D4	2F	Q9	4G
D5	2F	Q10	5F
D6	3L	Q11	5G
D7	5G	Q12	4H
D8	5G	Q13	4J
D9	1F	Q14	4J
D10	1F	Q15	1H
D11	5G	RB1	2B
D12	1F		
D13	1H	RV1	5B
IC1	1H	RV2	5E
IC1A		RV3	5F
IC1B		RV4	2J
IC1C		RV5	4H
IC1D		RV6	4G
IC1E		RV7	2H
IC1F		RV8	5H
IC2	1J	RV9	4J
IC2B		RV10	3H
IC2C		RV11	3J
IC2D		RV12	2A
IC2E		RV13	3D
IC2F		RV14	5H
IC3	2H	RV15	5C
IC3A		RV16	5G
IC3B		RV17	2J
IC3C		RV501	6C
IC3D		RV502	6D
IC3F		RV503	6E
IC4	2J		
IC4A		(SW-86 BOARD)	
IC4B		RV36	1A
IC4C		RV37	1A
IC4D			
IC4E		SW1	3A
IC5	2K	SW2A	
IC5A			
IC5B		TP1	2J
IC5C		TP2	4G
IC5D		TP3	1F
IC5E		TP4	1F
IC6	2K	TP5	2H
IC6B		TP6	4J
IC6C		TP7	3J
IC6D		TP8	3L
IC6E		TP9	4A
IC7	3J	TP10	5C
IC7B		TP11	3L
IC7C		TP12	3L
IC7D		TP13	5J
IC7E		TP14	4F
IC8	3K		
IC8B		(SW-86 BOARD)	
IC8C		TPA	2A
IC8D			
IC9	3K	TP501	8A
IC9B		TP502	8A
IC9C		TP503	8A
IC10	3K	TP504	9A
IC11	5G	TP505	9A
IC12	5G	TP506	9A
IC13	5H		
IC14	5J	TPE1	1D
IC15	5J	TPE2	4A
IC16	4K	TPE3	4F
IC17	4K	TPE4	1F
		TPE5	4H
		TPE6	2L
(SW-86 BOARD)			
IC27	1A	X1	1J
J501	8B		
J502	8B		
J503	8B		
Q1	4J		
Q3	2H		
Q4	2H		

C-27(4/13)

C-27(3/13)

C-27(2/13)

BVH-2500P

C-27(4/13)

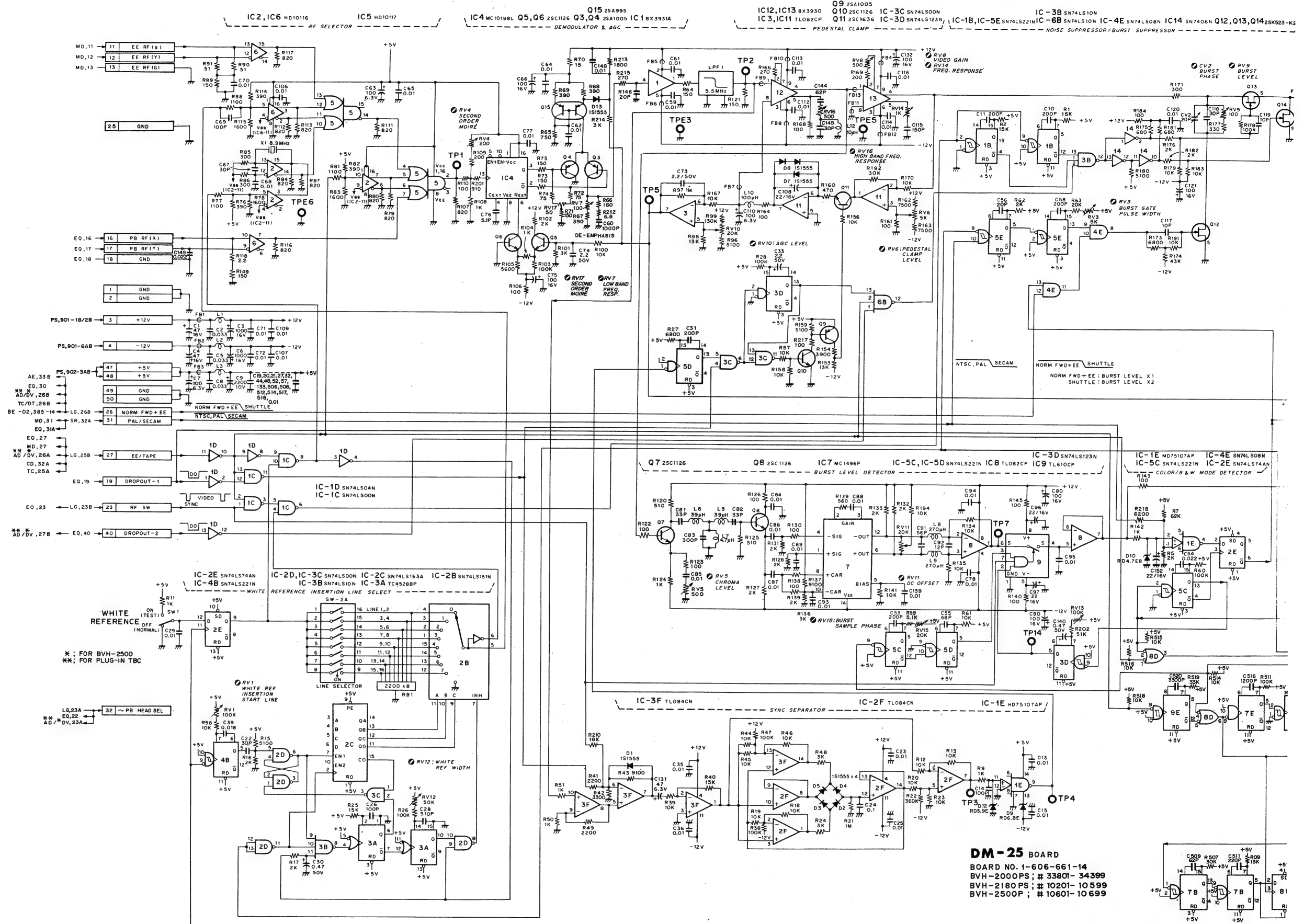
2000PS; #33801 - 34399
2180PS; #10201 - 10599
2500P; #10601 - 10699

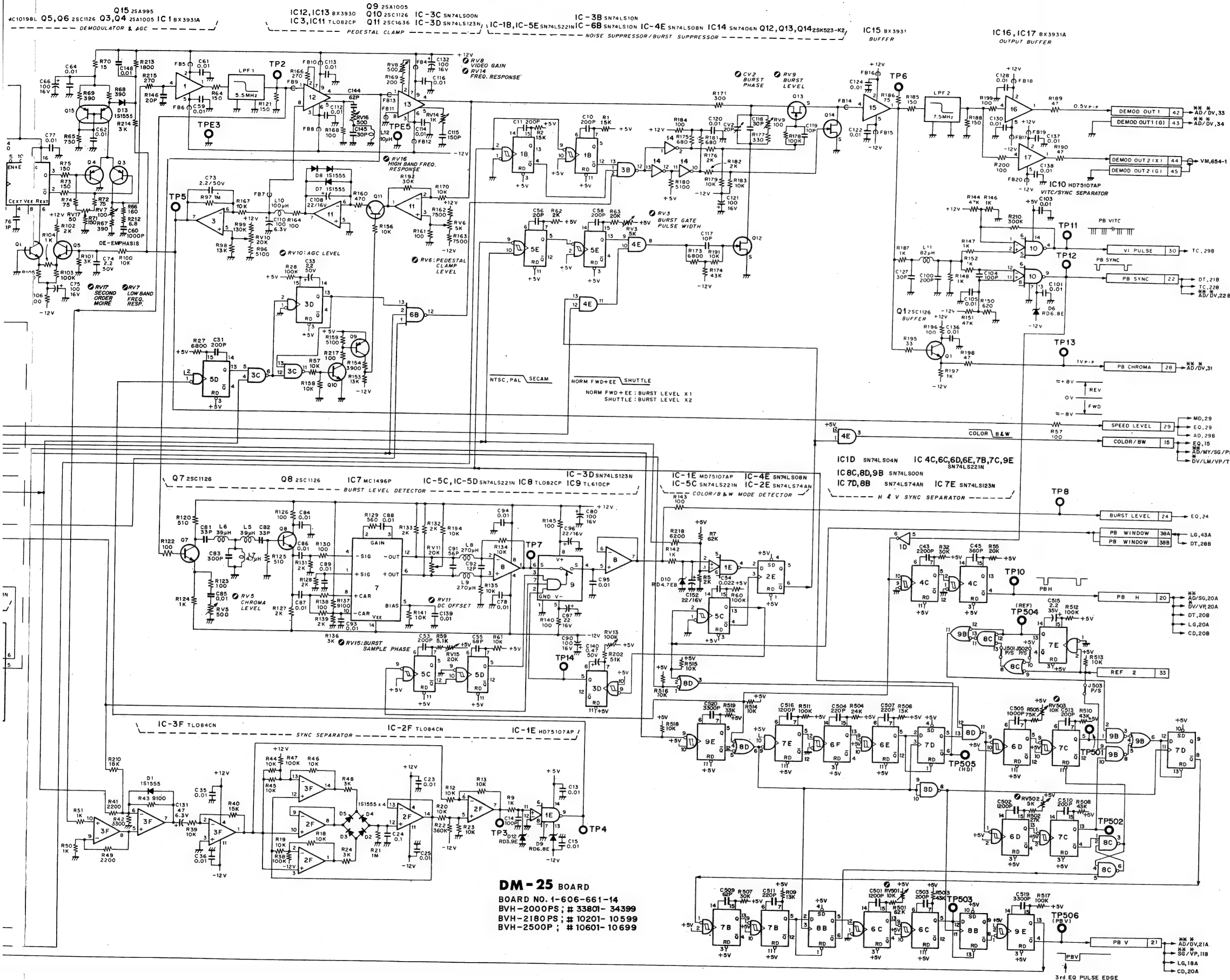
CARD RACK DM-25

DM-25 CARD RACK

1-606-661-14 2000PS; #33801 - 34399
2180PS; #10201 - 10599
2500P; #10601 - 10699

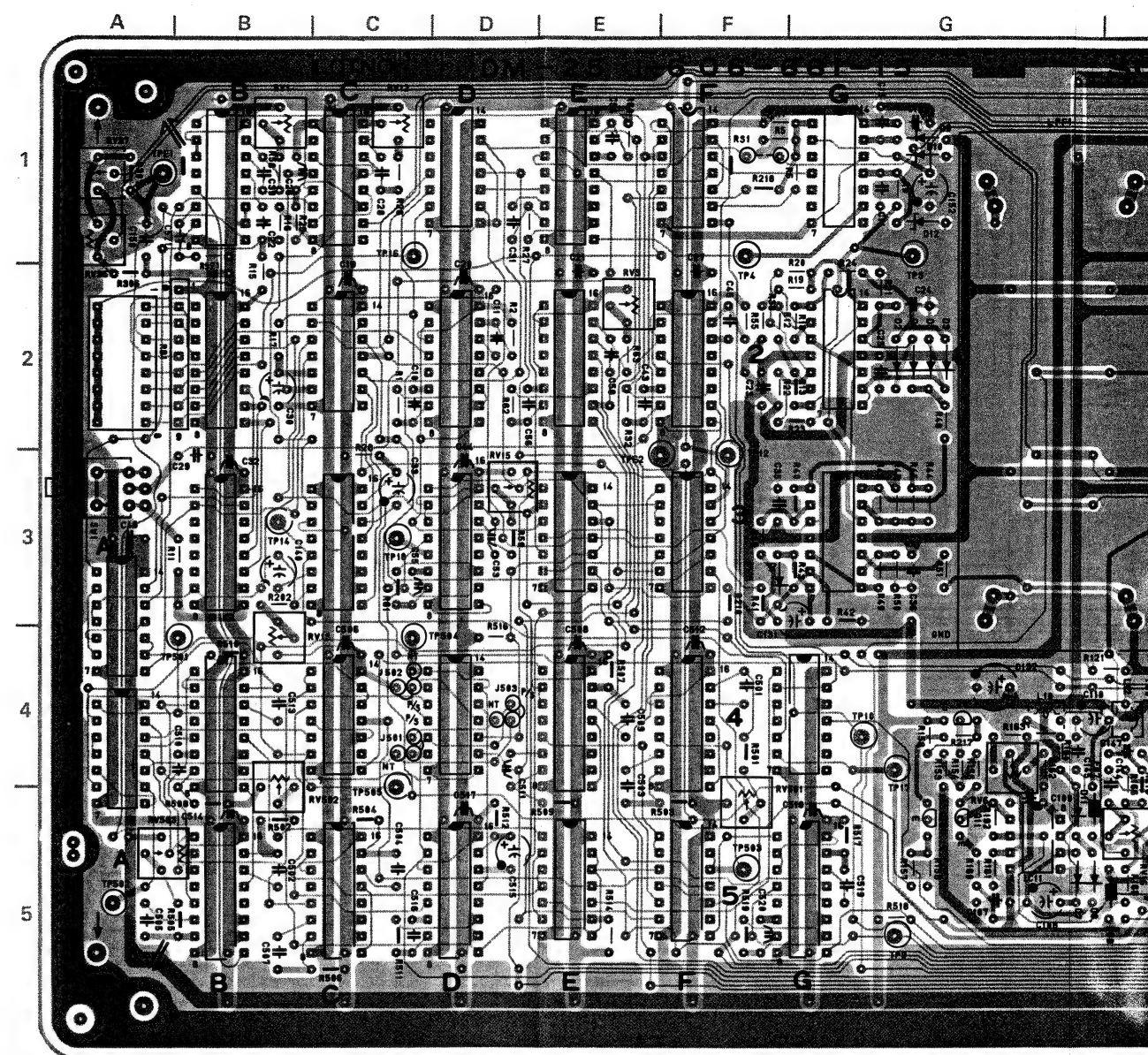
DM-25 BOARD Video Demodulator





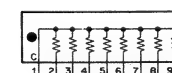
DM-25 BOARD (1-606-661-15)
Component Side**DM**
-25WHITE
REFON
OFF

4



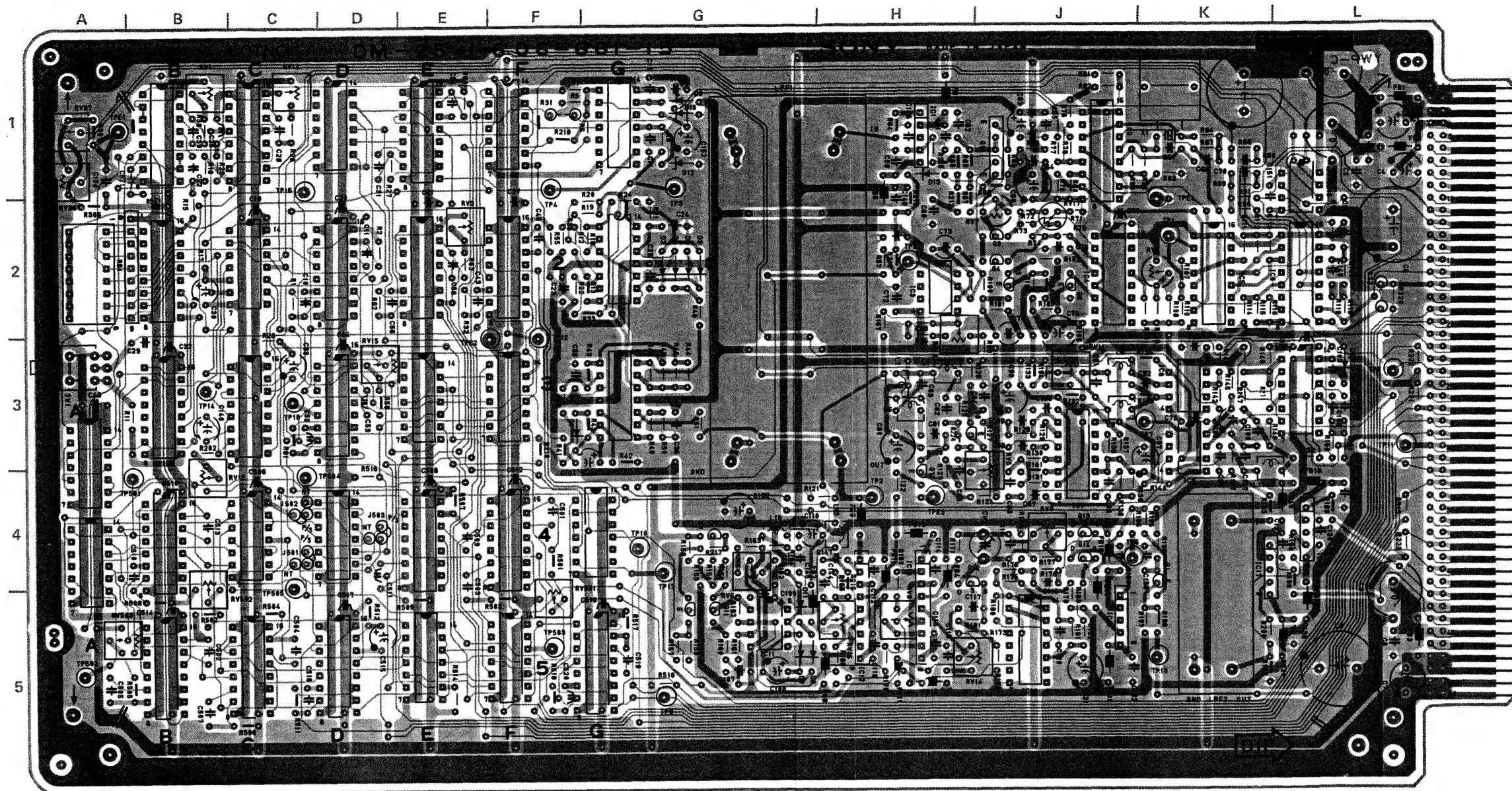
■ 1-606-661-15 COMPONENT SIDE

RB1



DM
-25WHITE
REFON
OFF

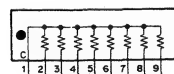
4



1-606-661-15 COMPONENT SIDE

1-606-661-15 SOLDER SIDE

RB1



DM-25 (1-606-661-15 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CV2	4J	Q5	2J
D1	3F	Q6	2J
D2	2G	Q7	4H
D3	2G	Q8	3H
D4	2G	Q9	4G
D5	2G	Q10	5G
D6	3L	Q11	5G
D7	5G	Q12	4H
D8	5G	Q13	4J
D9	1G	Q14	4J
D10	1G	Q15	1J
D11	5G		
D12	1G	RB1	2B
D13	1H		
IC1	1H	RV1	1B
IC1B		RV3	2E
IC1C		RV4	2K
IC1D		RV5	4J
IC1E		RV6	4G
IC1F		RV7	2J
IC1G		RV8	5H
IC1H		RV9	4J
IC1I		RV10	3H
IC2	1J	RV11	3J
IC2B		RV12	2C
IC2C		RV13	4B
IC2D		RV14	5H
IC2E		RV15	3D
IC2F		RV16	5H
IC2G		RV17	2J
IC3	2H	RV36	1A
IC3A		RV37	1A
IC3B		RV501	5F
IC3C		RV502	4B
IC3D		RV503	5A
IC3E			
IC3F		SW1	3A
IC3G		SW2A	
IC4	2J		
IC4A		TP1	2K
IC4B		TP2	4H
IC4C		TP3	1G
IC4D		TP4	1F
IC4E		TP5	2H
IC4F		TP6	4J
IC4G		TP7	3K
IC5	2K	TP8	3L
IC5B		TP9	5G
IC5C		TP10	4G
IC5D		TP11	3L
IC5E		TP12	3F
IC5F		TP13	5K
IC5G		TP14	3B
IC6	2L	TP16	2C
IC7	3J	TP17	4G
IC8	3K	TP18	3C
IC9	3K	TP501	4B
IC10	3L	TP502	5A
IC11	5G	TP503	5F
IC12	5H	TP504	4C
IC13	5H	TP505	4C
IC14	5J		
IC15	5J	TPE1	1A
IC16	4L	TPE2	3F
IC17	4K	TPE3	4H
IC18	2L	TPE4	1K
Q1	4K		
Q3	2J	X1	1J
Q4	2J		

C-27(9/13)

C-27(10/13)

BVH-2500/P

C-27(8/13)

C-27(9/13)

C-27(10/1)

BVH-2000/PM

C-27(2/7)

C-27(3)

C-27(4/7)

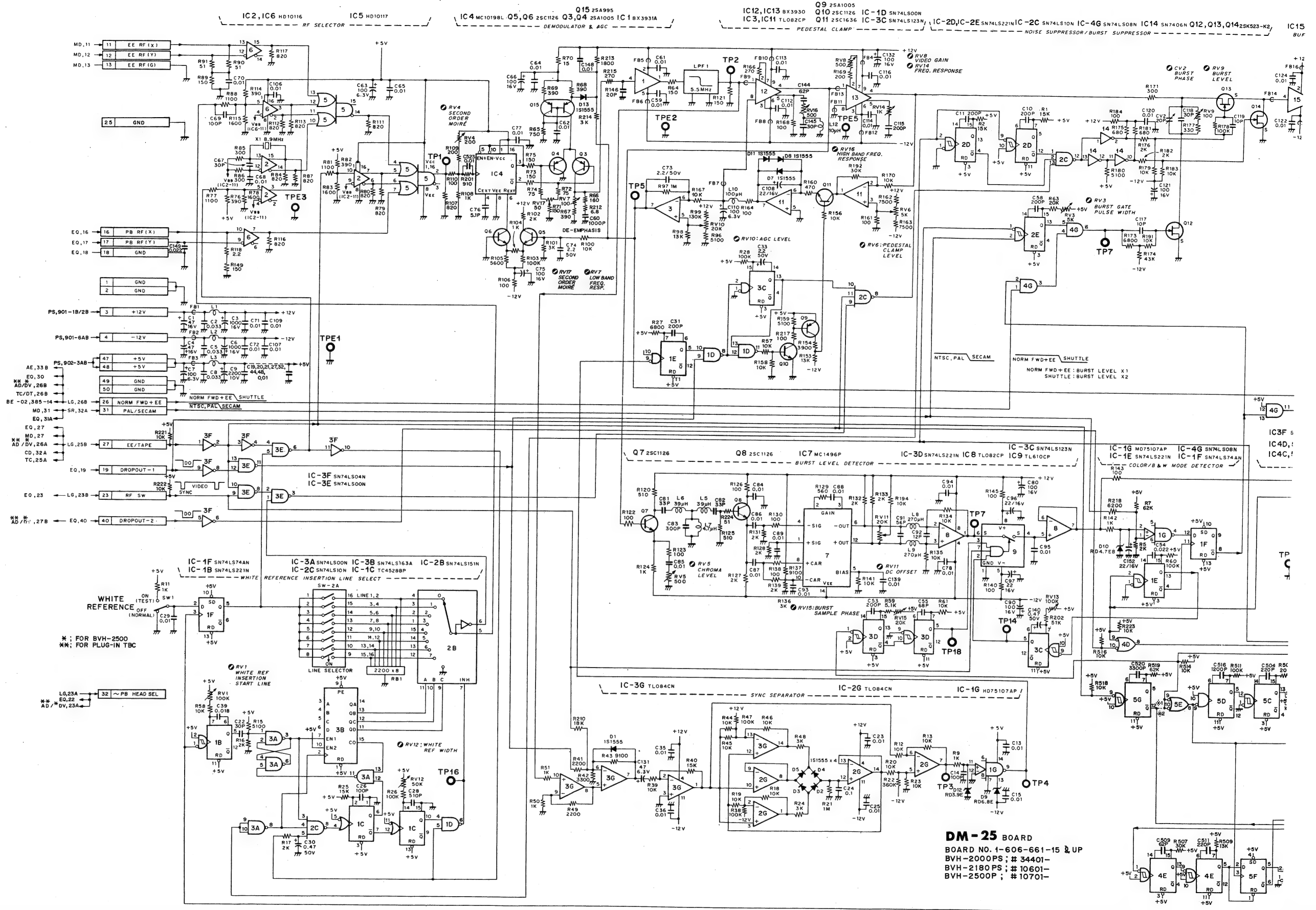
C-27(8/13)

C-27(9)

C-27(10/13)

DM-25 BOARD

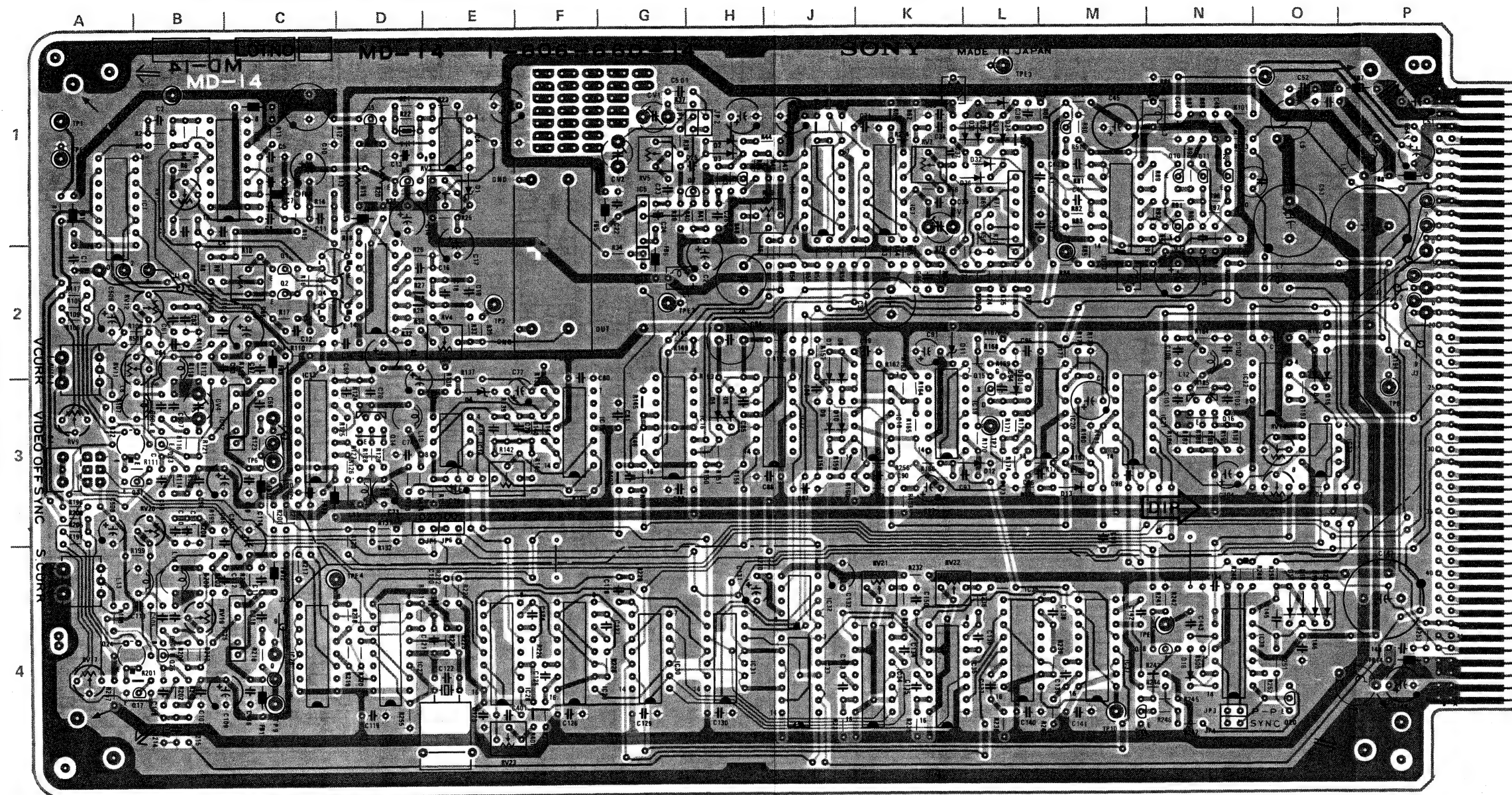
Video Demodulator



2, 14 MODEL)

MD
-14RE
CUR
(V)METER
RF (V)
RF (S)

NS

MD
-14REC
CUR
(V)METER
RF (V)
RF (S)REC
CUR
(S)

1-606-660-14 COMPONENT SIDE

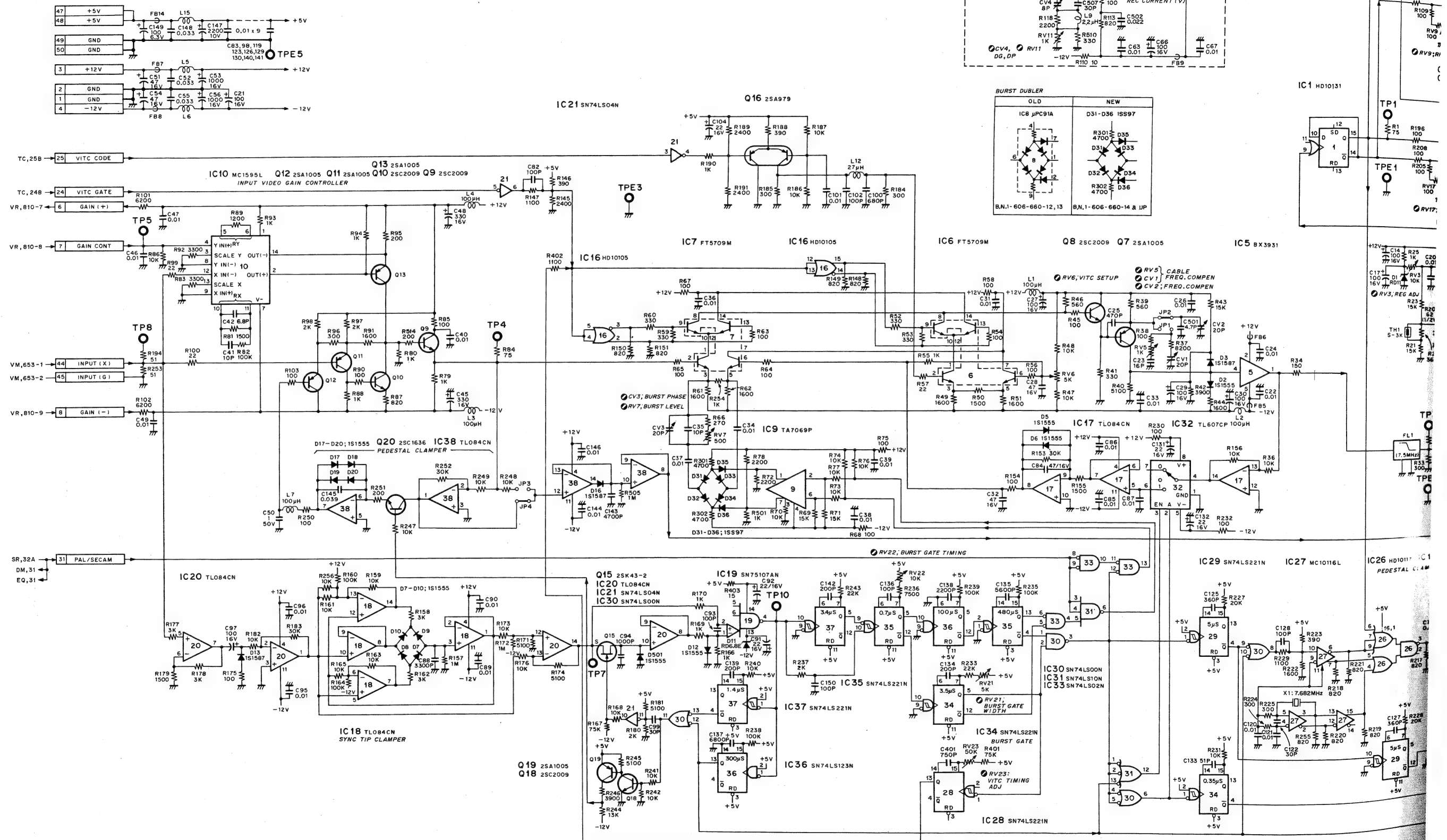
1-606-660-14 SOLDER SIDE

MD-14 (1-606-660-14 & UP)

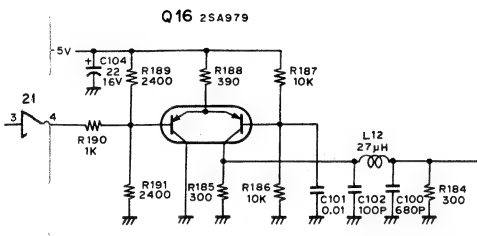
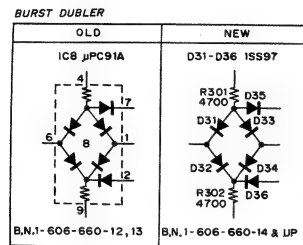
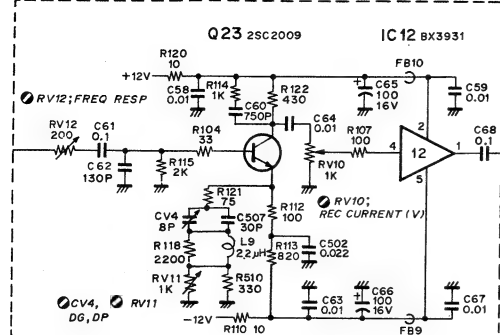
BVH-2000/PS/PM
BVH-2180/PS/PM

CV1	1G	Q1	2C
CV2	1G	Q2	2C
CV3	1K	Q3	2C
(PS)		Q4	2C
CV4	3B	Q5	1D
		Q6	1D
		Q7	1H
D1	1E	Q8	1H
D2	1H	Q9	1M
D3	1H	Q10	1M
D4	3E	Q11	1M
D5	3H	Q12	1M
D6	3H	Q13	1M
D7	3J	Q14	3D
D8	3J	Q15	3L
D9	3J	Q16	3M
D10	3J	Q17	4B
D11	2K	Q18	4N
D12	3L	Q19	4M
D13	3M	Q20	4P
D14	3P	Q21	3B
D15	3P	Q22	3A
D16	4N	Q23	3B
D17	4P	Q24	4A
D18	4P	Q25	4B
D19	4P		
D20	4P	RV1	1B
D31	1L	RV2	2C
D32	1L	RV3	1E
D33	1L	RV4	2E
D34	1L	RV5	1G
D35	1L	RV6	1J
D36	1L	RV7	1K
D501	3L	RV9	3A
		RV10	2A
IC1	1A	RV11	2B
IC2	1B	RV12	2B
IC3	2D	RV13	3E
IC4	1E	RV14	3P
IC5	1G	RV15	3P
IC6	1J	RV17	4A
IC7	1K	RV18	4A
IC9	1L	RV19	4B
IC10	1M	RV20	3B
IC12	3C	RV21	4K
IC13	3C	RV22	4K
IC14	3E	RV23	4E
IC15	3F		
IC16	3G	S1	3A
IC17	3J		
IC18	3K	TH1	1D
IC19	3K		
IC20	3M	TP1	1A
IC21	3M	TP2	1B
IC22	3P	TP3	2E
IC23	3P	TP4	2M
IC25	4C	TP5	1P
IC26	4C	TP6	3C
IC27	4D	TP7	3L
IC28	4E	TP8	3O
IC29	4F	TP9	4C
IC30	4G	TP10	4M
IC31	4H		
IC32	4J	TPE1	1A
IC33	4J	TPE2	2G
IC34	4K	TPE3	1L
IC35	4K	TPE4	4C
IC36	4L	TPE5	4N
IC37	4M		
IC38	4N	X1	4E
JP1	1H		
JP2	1H		
JP3	4N		
JP4	4N		
JP5	3E		
JP6	3E		

MD-14 BOARD
Video Modulator



OLD UP TO #34999 (BVH-2000PS)
UP TO #10699 (BVH-2180PS)



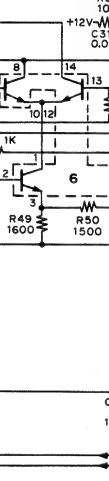
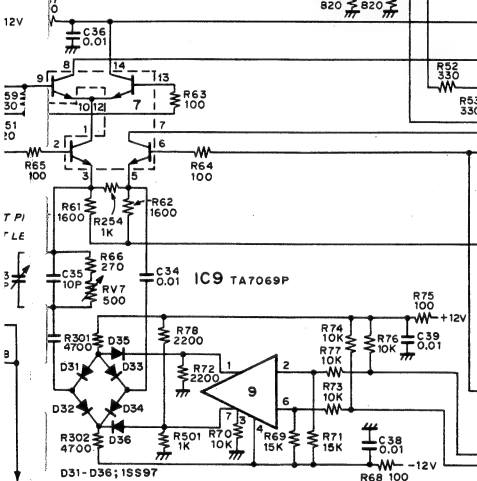
C7 FT5709M

IC16 HD10105

IC6 FT5709M

Q8 2SC2009 Q7 2SA1005

IC5 BX3931



IC17 TL084CN

IC32 TL607CP

IC19 SN75107AN

IC35 SN74LS221N

IC37 SN74LS221N

IC36 SN74LS123N

IC34 SN74LS221N

IC33 SN74LS100N

IC31 SN74LS10N

IC30 SN74LS10N

IC28 SN74LS221N

IC29 SN74LS221N

IC27 MC10116L

IC26 HD10117

IC13 MC10198L

Q14 2SA979

IC15 TL084CN

IC14 TL607CP

IC22 TL082CP

IC21 SN74LS04N

IC23 TL607CP

IC24 2SC1733

IC25 2SC2009

IC26 2SC1733

IC27 2SC1733

IC28 2SC1733

IC29 2SC1733

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IC41 2SC1733

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IC152 2SC1733

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IC154 2SC1733

IC155 2SC1733

IC156 2SC1733

IC157 2SC1733

IC158 2SC1733

IC159 2SC1733

IC160 2SC1733

IC161 2SC1733

IC162 2SC1733

IC163 2SC1733

IC164 2SC1733

IC165 2SC1733

IC166 2SC1733

IC167 2SC1733

IC168 2SC1733

IC169 2SC1733

IC170 2SC1733

IC171 2SC1733

IC172 2SC1733

IC173 2SC1733

IC174 2SC1733

IC175 2SC1733

IC176 2SC1733

IC177 2SC1733

IC178 2SC1733

IC179 2SC1733

IC180 2SC1733

IC181 2SC1733

IC182 2SC1733

IC183 2SC1733

IC184 2SC1733

IC185 2SC1733

IC186 2SC1733

IC187 2SC1733

IC188 2SC1733

IC189 2SC1733

IC190 2SC1733

IC191 2SC1733

IC192 2SC1733

IC193 2SC1733

IC194 2SC1733

IC195 2SC1733

IC196 2SC1733

IC197 2SC1733

IC198 2SC1733

IC199 2SC1733

IC200 2SC1733

IC201 2SC1733

IC202 2SC1733

IC203 2SC1733

IC204 2SC1733

IC205 2SC1733

IC206 2SC1733

IC207 2SC1733

IC208 2SC1733

IC209 2SC1733

IC210 2SC1733

IC211 2SC1733

IC212 2SC1733

IC213 2SC1733

IC214 2SC1733

IC215 2SC1733

IC216 2SC1733

IC217 2SC1733

IC218 2SC1733

IC219 2SC1733

IC220 2SC1733

IC221 2SC1733

IC222 2SC1733

IC223 2SC1733

IC224 2SC1733

IC225 2SC1733

IC226 2SC1733

IC227 2SC1733

IC228 2SC1733

IC229 2SC1733

IC230 2SC1733

IC231 2SC1733

IC232 2SC1733

IC233 2SC1733

IC234 2SC1733

IC235 2SC1733

IC236 2SC1733

IC237 2SC1733

IC238 2SC1733

IC239 2SC1733

IC240 2SC1733

IC241 2SC1733

IC242 2SC1733

IC243 2SC1733

IC244 2SC1733

IC245 2SC1733

IC246 2SC1733

IC247 2SC1733

IC248 2SC1733

IC249 2SC1733

IC250 2SC1733

IC251 2SC1733

IC252 2SC1733

IC253 2SC1733

IC254 2SC1733

IC255 2SC1733

IC256 2SC1733

IC257 2SC1733

IC258 2SC1733

IC259 2SC1733

IC260 2SC1733

IC261 2SC1733

IC262 2SC1733

IC263 2SC1733

IC264 2SC1733

IC265 2SC1733

IC266 2SC1733

IC267 2SC1733

IC268 2SC1733

IC269 2SC1733

IC270 2SC1733

IC271 2SC1733

IC272 2SC1733

IC273 2SC1733

IC274 2SC1733

IC275 2SC1733

IC276 2SC1733

IC277 2SC1733

IC278 2SC1733

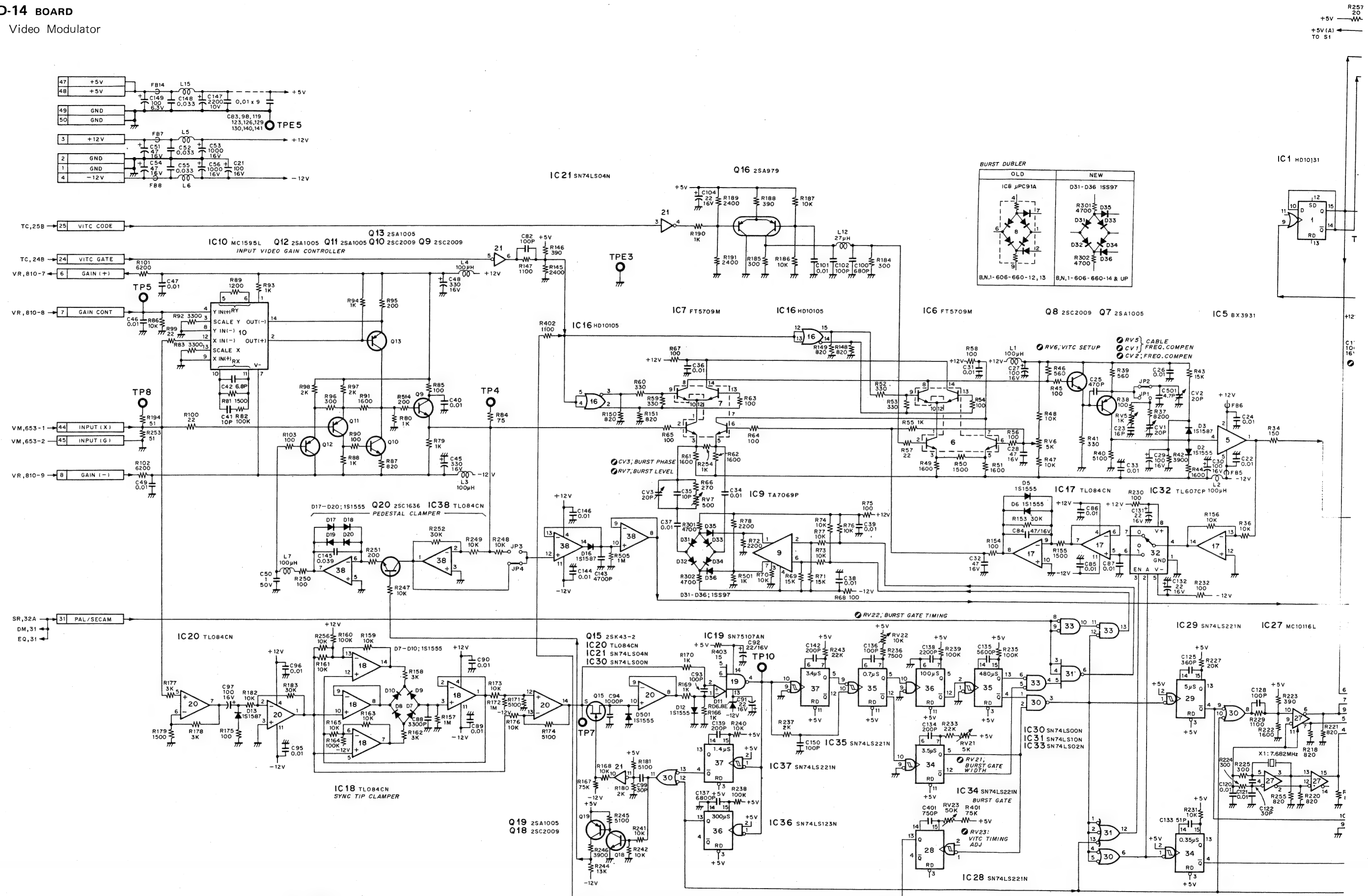
IC279 2SC1733

IC280 2SC1733

IC281 2SC1733

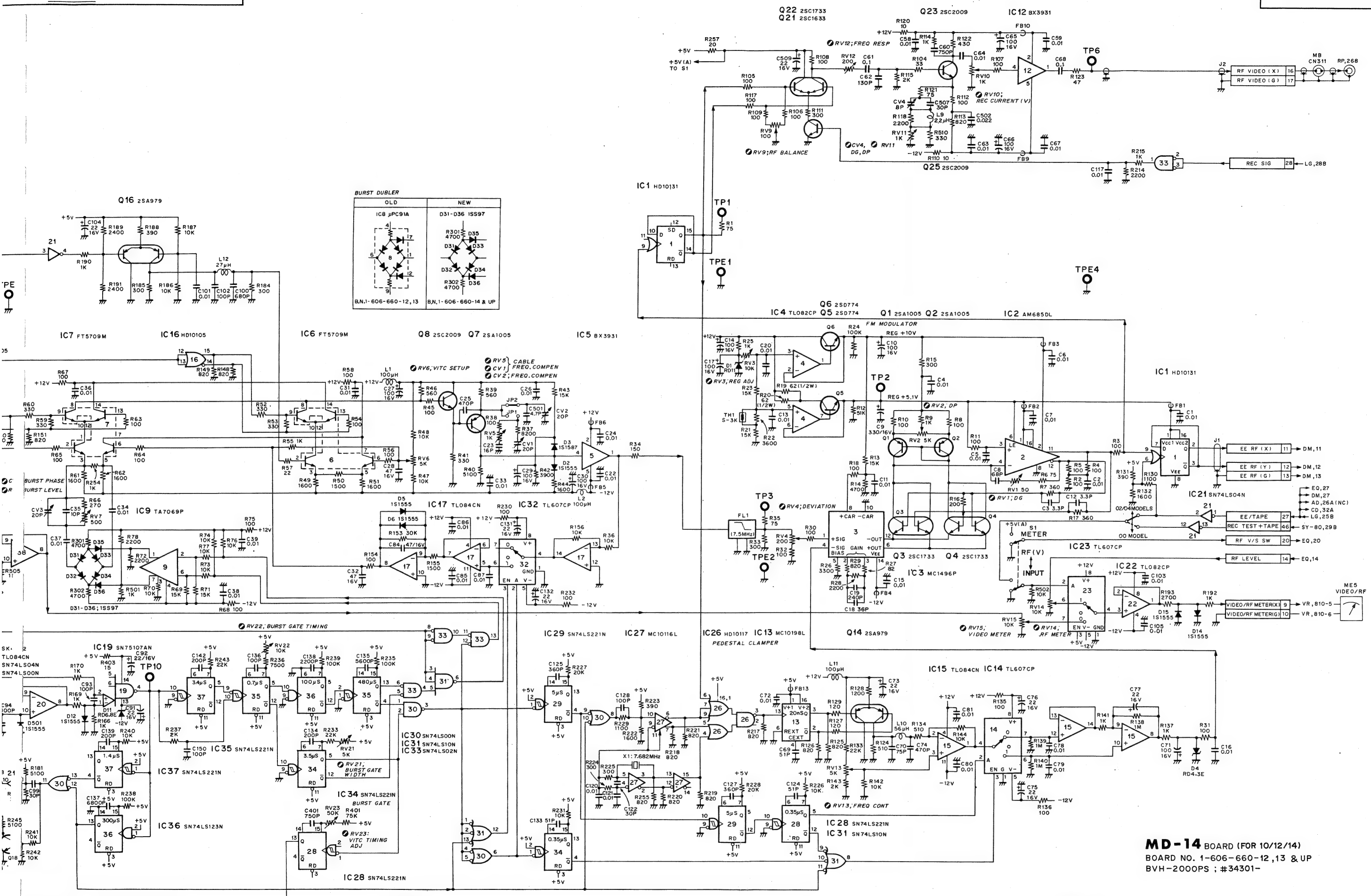
MD-14 BOARD

Video Modulator



C-33(5/7)

C-33(6/7)



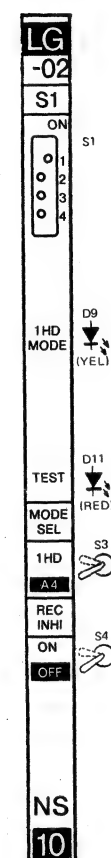
C-33(6/7)

C-33(7/7)

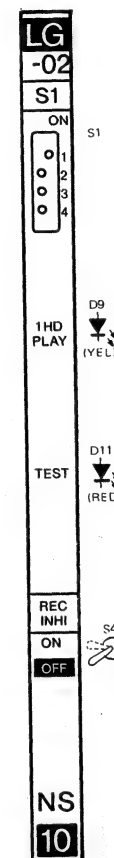
LG-02(A) BOARD (1-606-682-14)

Component Side

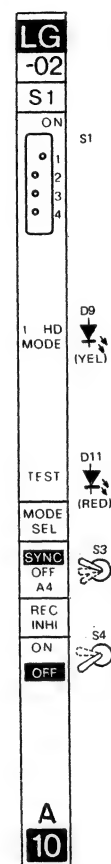
BVH-2000PS
(For 10, 12, 14 MODEL)



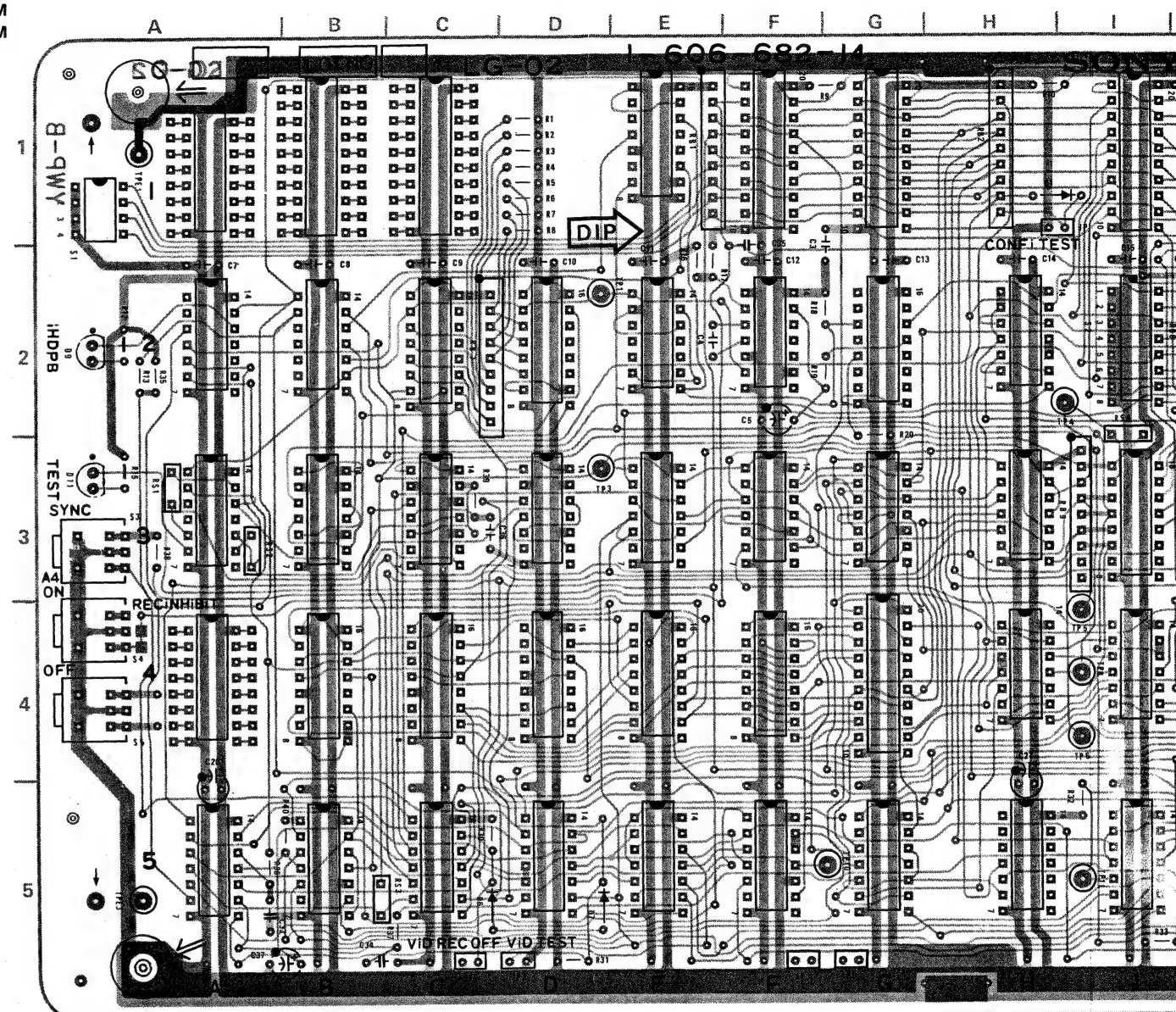
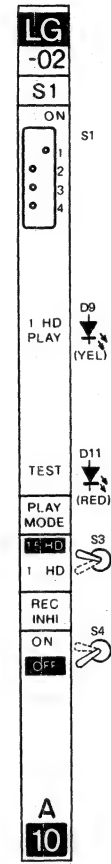
BVH-2000
(For 10, 12 MODEL)



BVH-2000PS
BVH-2180PS

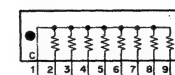


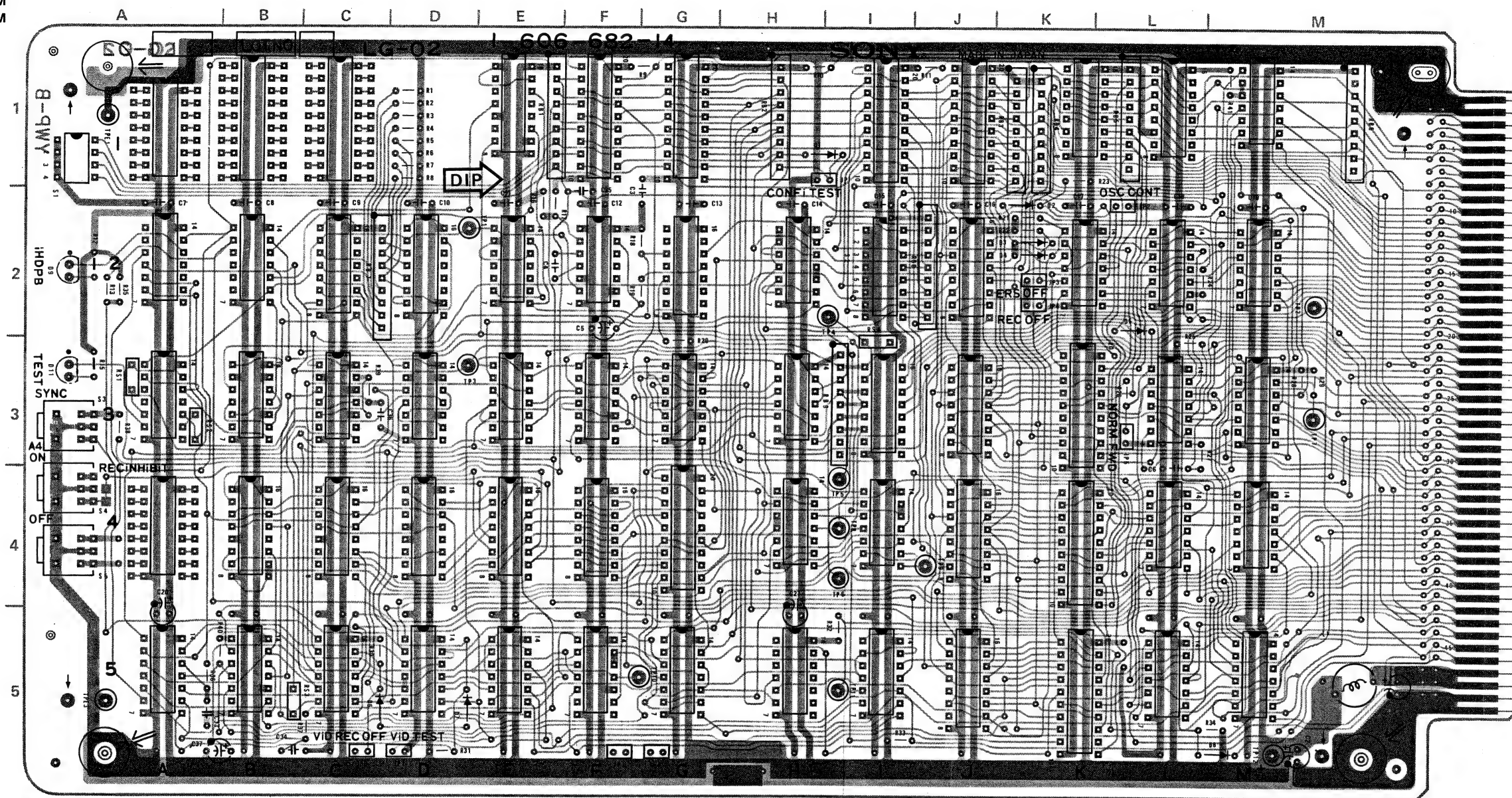
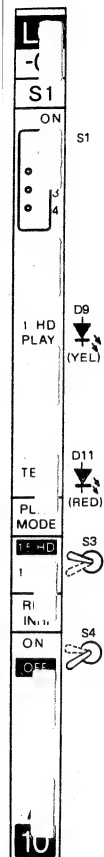
BVH-2000/PM
BVH-2180/PM



1-606-682-14 COMPONENT SIDE

RB1, 2, 3, 4, 5, 6, 7, 8, 9

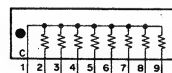


BV 2000/PM
BV 2180/PM

■ 1-606-682-14 COMPONENT SIDE

■ 1-606-682-14 SOLDER SIDE

RB1, 2, 3, 4, 5, 6, 7, 8, 9



LG-02(A) (1-606-682-13 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM

D1	1H	JP1	1H
D2	2K	JP2	2L
D3	2K	JP3	2K
D4	2K	JP4	2K
D5	2L	JP5	3L
D6	5C	JP6	5C
D7	5D	JP7	5D
D8	5H	JP8	5F
D9	2A	JP9	5G
D11	3A		

IC1A	RB1	1E
IC1C	RB2	1H
IC1E	RB3	1K
IC1F	RB4	1K
IC1G	RB5	1L
IC1I	RB6	1H
IC1J	RB7	2C
IC1K	RB8	2J
IC1L	RB9	3I

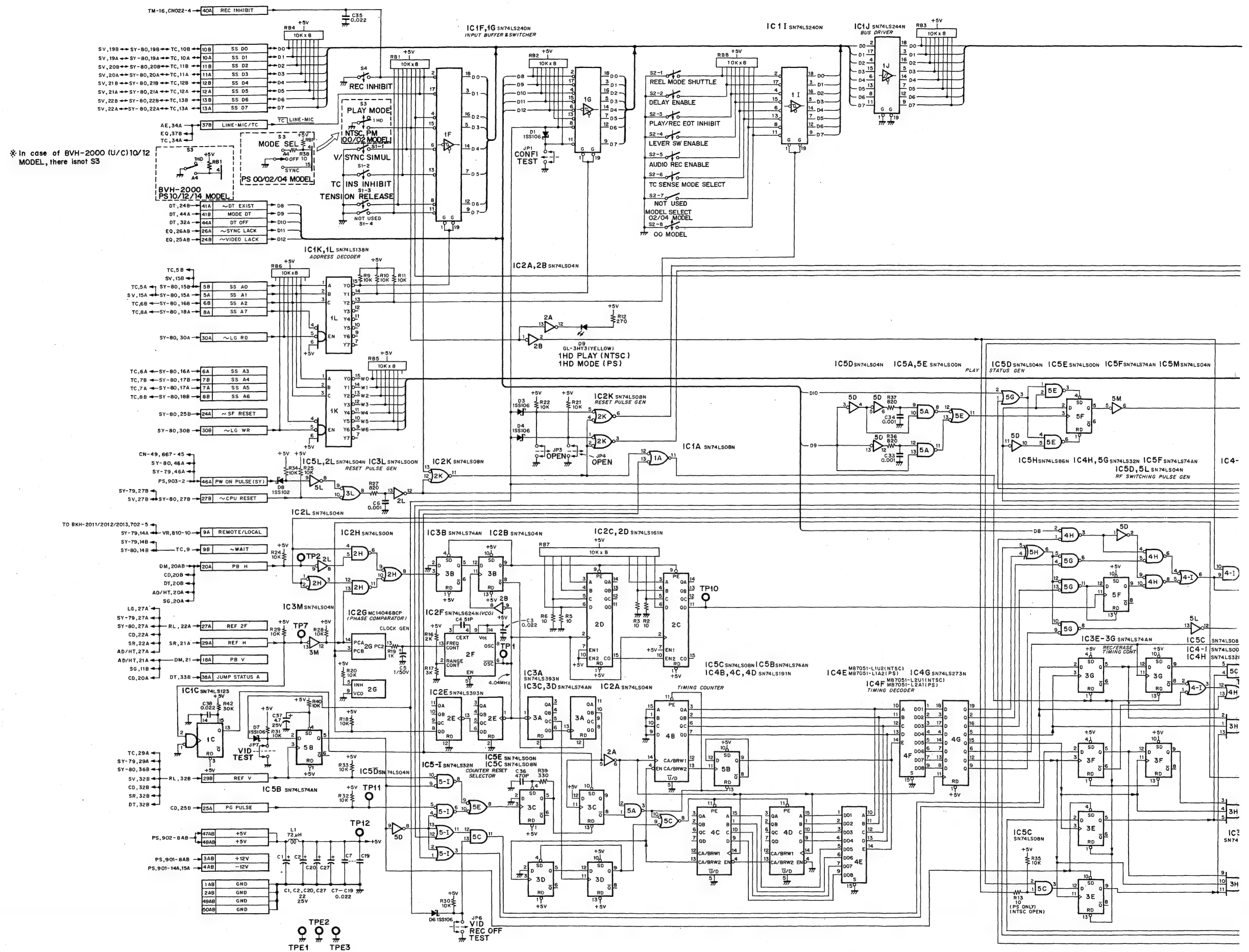
IC2A	S1	1A
IC2B	S2	2I
IC2C	S3	3A
IC2D	S4	4A

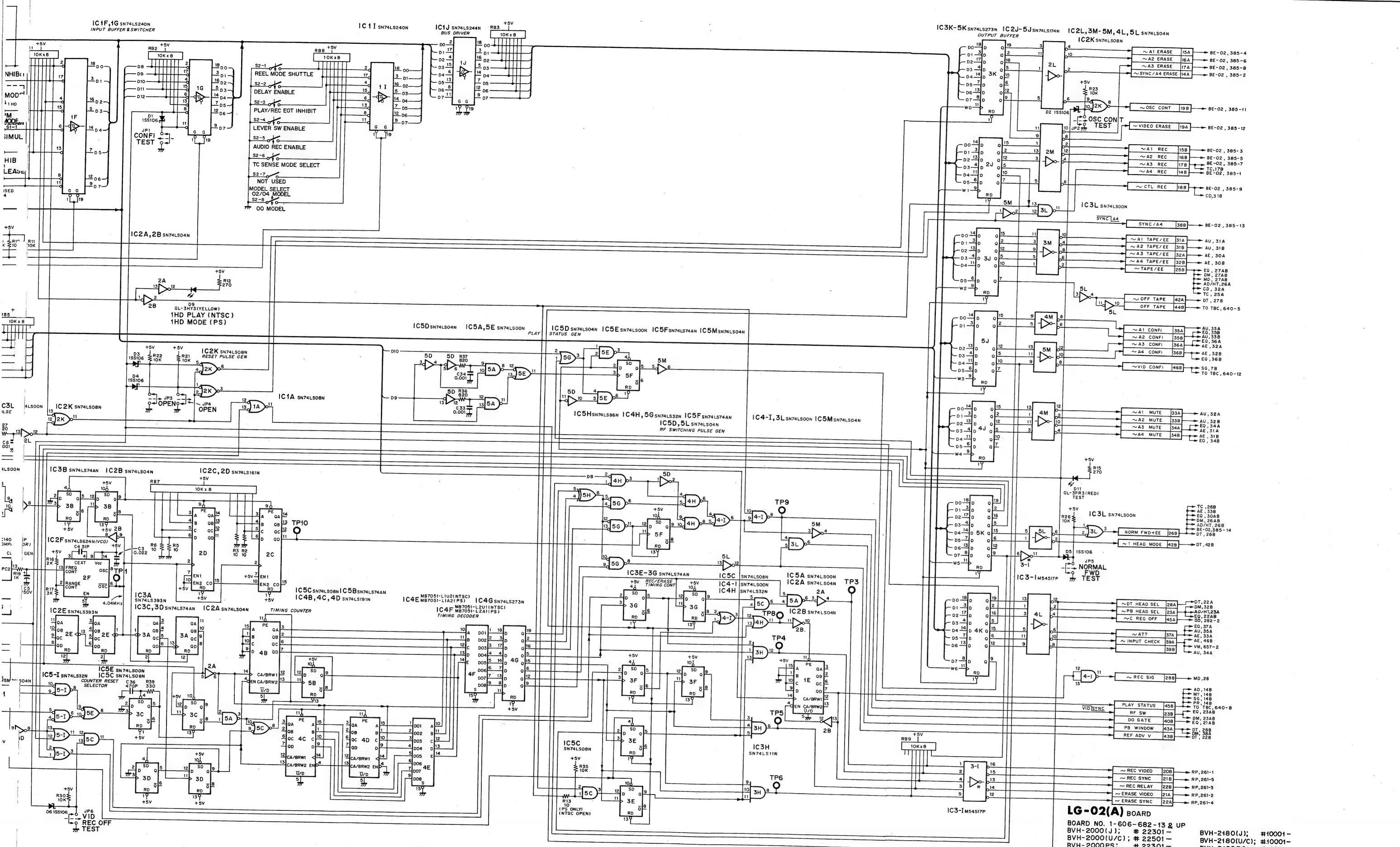
IC2E	TP1	2D
IC2F	TP2	2M
IC2G	TP3	3D
IC2H	TP4	2I
IC2J	TP5	4I
IC2K	TP6	4I
IC2L	TP7	3M
IC2M	TP8	4I
IC3A	TP9	4J
IC3B	TP10	5F
IC3C	TP11	5I
IC3D	TP12	5M

IC3E	TPE1	1A
IC3F	TPE2	1M
IC3G	TPE3	5A

IC3H		
IC3I		
IC3J		
IC3K		
IC3L		
IC3M		
IC4A		
IC4B		
IC4C		
IC4D		
IC4E		
IC4F		
IC4G		
IC4H		
IC4I		
IC4J		
IC4K		
IC4L		
IC4M		
IC5A		
IC5B		
IC5C		
IC5D		
IC5E		
IC5F		
IC5G		
IC5H		
IC5I		
IC5J		
IC5K		
IC5L		
IC5M		

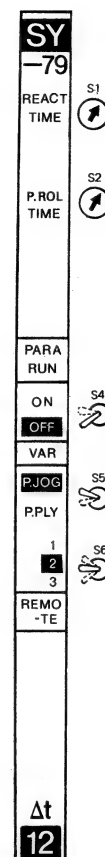
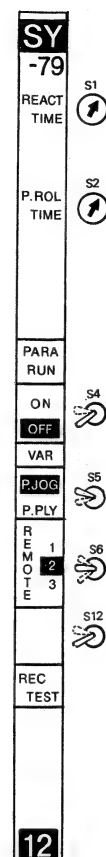
LG-02(A) BOARD
LOGIC



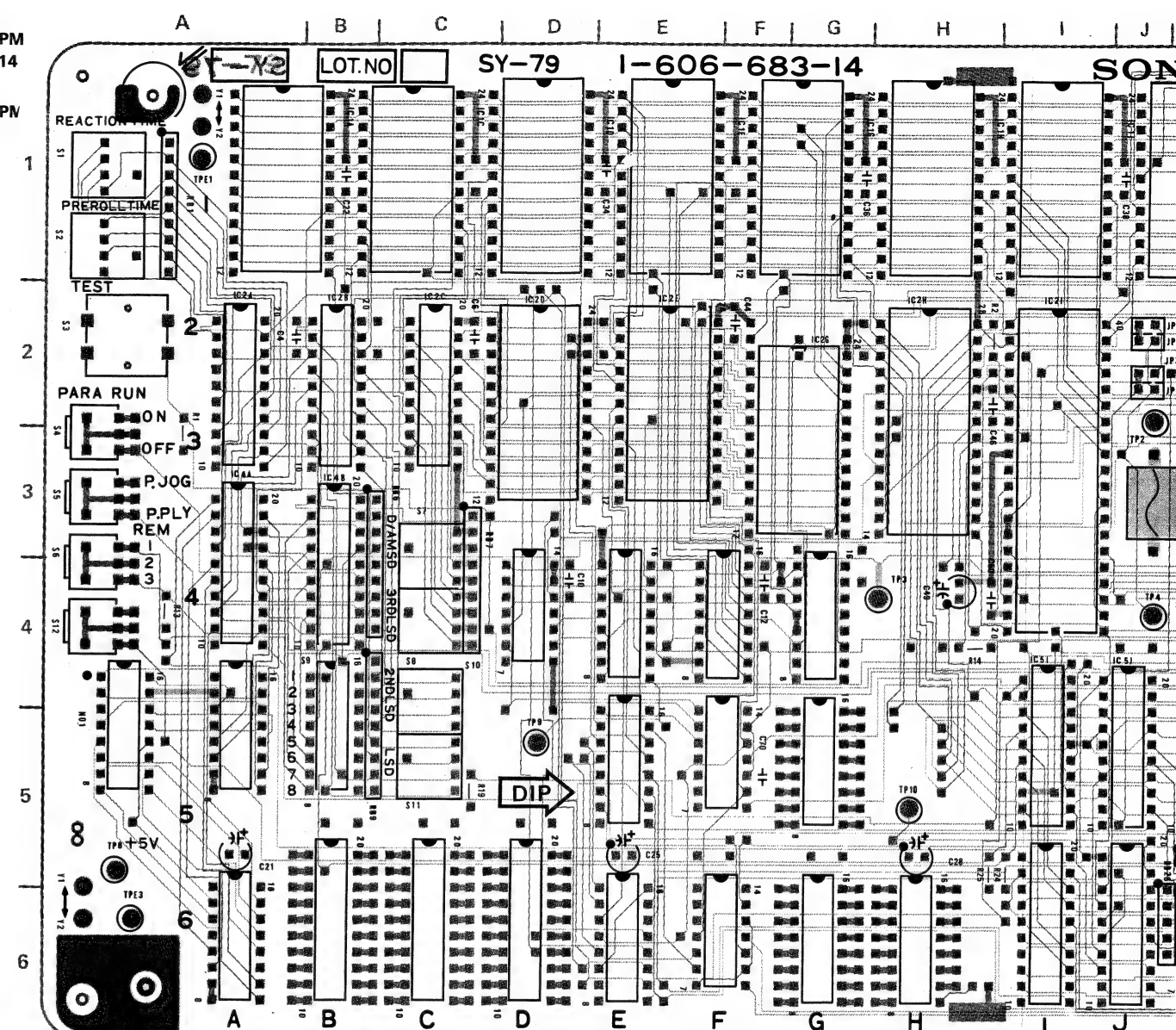
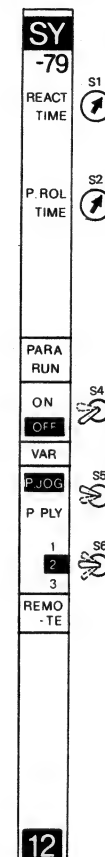


SY-79 BOARD (1-606-683-14)
 Component Side

BVH-2500/P

BVH-2000/PS
(for 00/10 models)BVH-2000/PS/PM
(for 02/12/04/14 models)

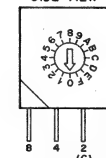
BVH-2180/PS/PM



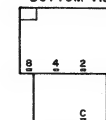
1-606-683-14 COMPONENT SIDE

S1, 2

-SIDE VIEW-

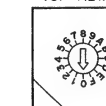


-BOTTOM VIEW-

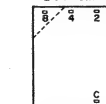


S7, 8, 10, 11

-TOP VIEW-

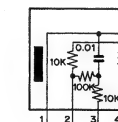


-BOTTOM VIEW-

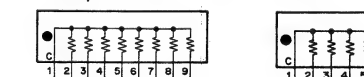


CP1, 2, 3

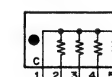
-SIDE VIEW-



RB1, 2, 3, 5, 6, 7, 8, 9, 28, 29



RB26, 27



System Control CPU-1

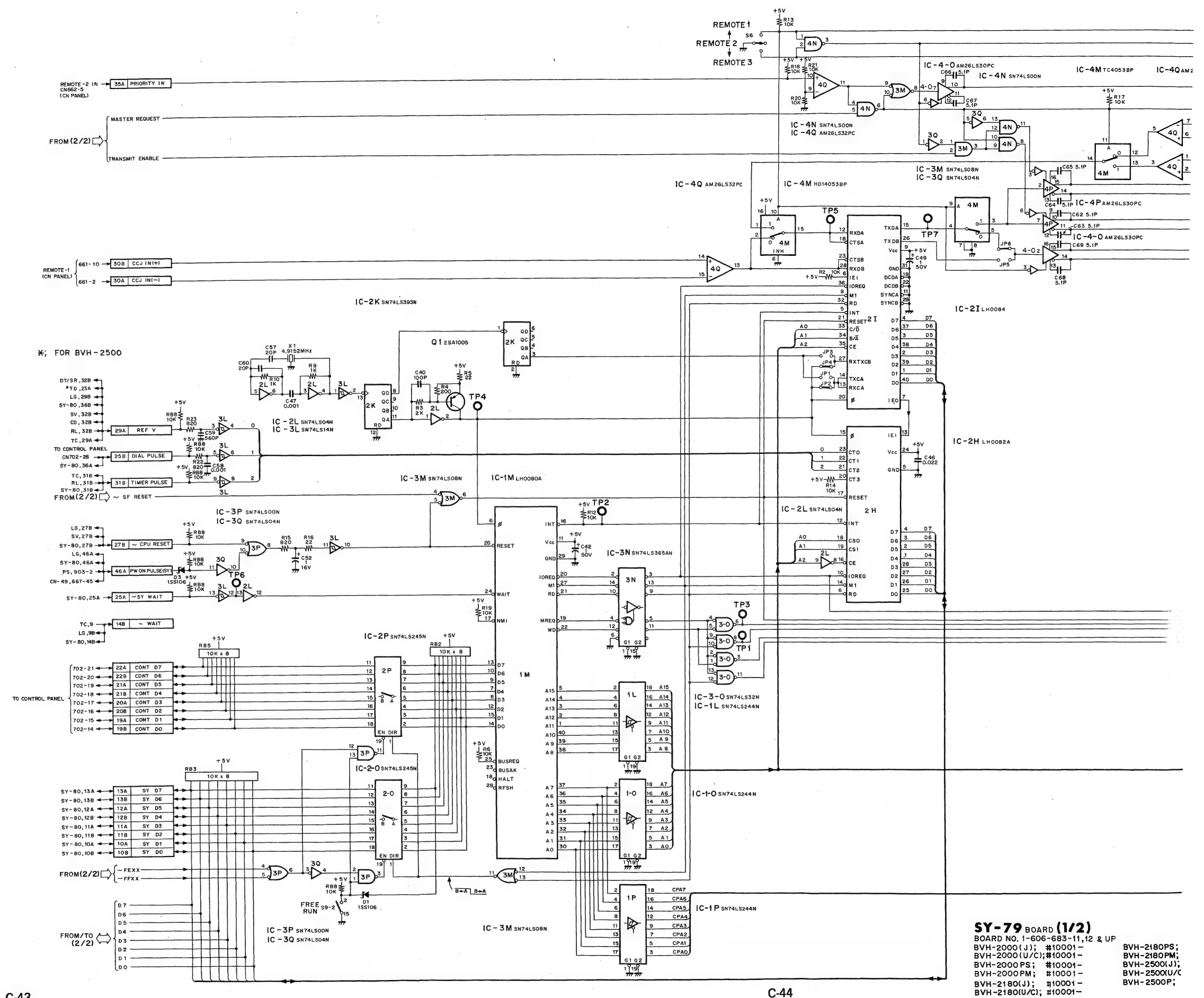
BVH-2180/PS/PM	C-43	C-44	C-45
BVH-2000/PS/PM			

C-75

C-74

C-73

BVH-2500/P

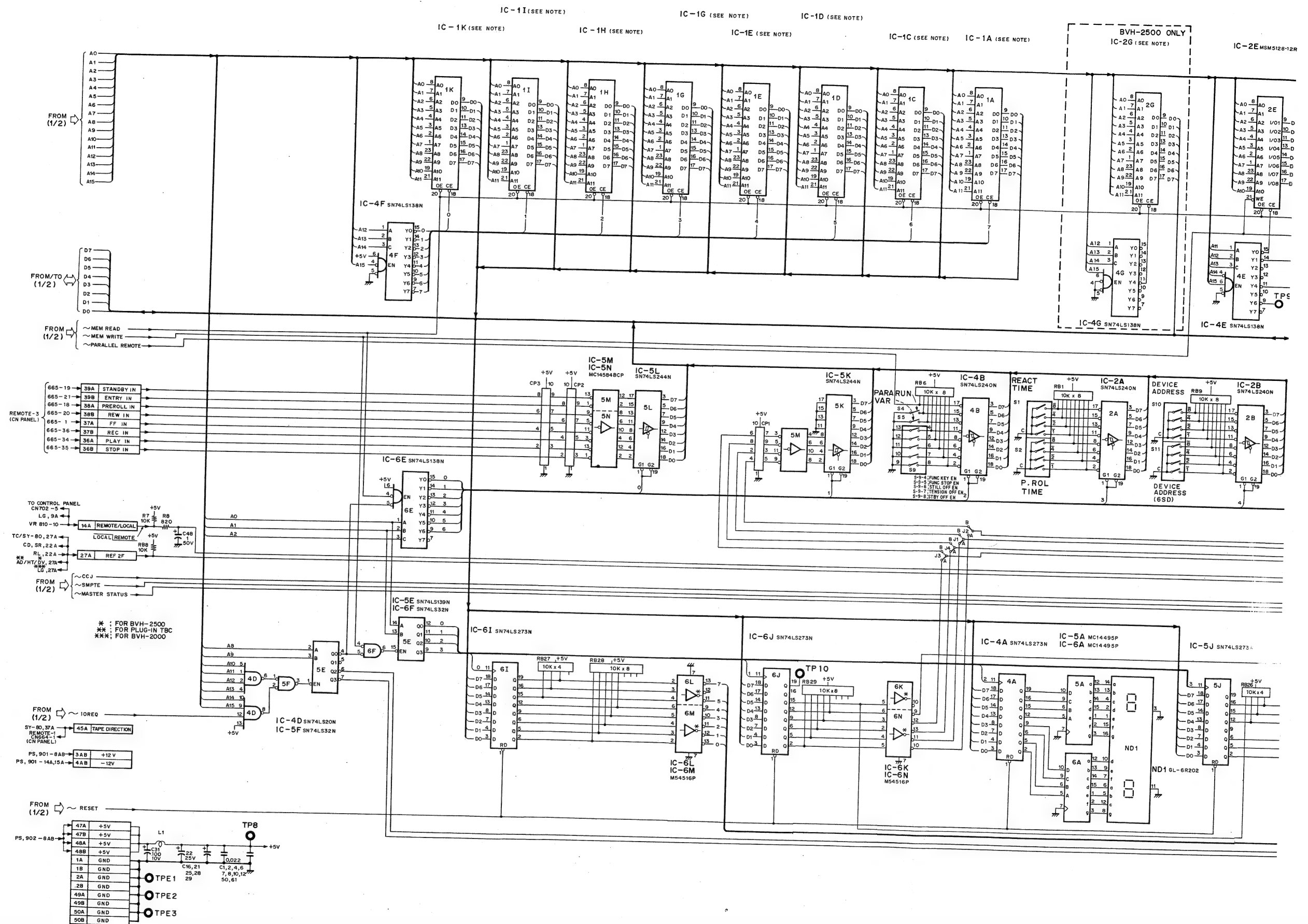


SY-79 BOARD (1/2)
BOARD NO. 1-606-683-11, 12 & UP
BVH-2000(J); #10001-
BVH-2000(U/C); #10001-
BVH-2000PS; #10001-
BVH-2000PM; #10001-
BVH-2180(J); #10001-
BVH-2180(U/C); #10001-



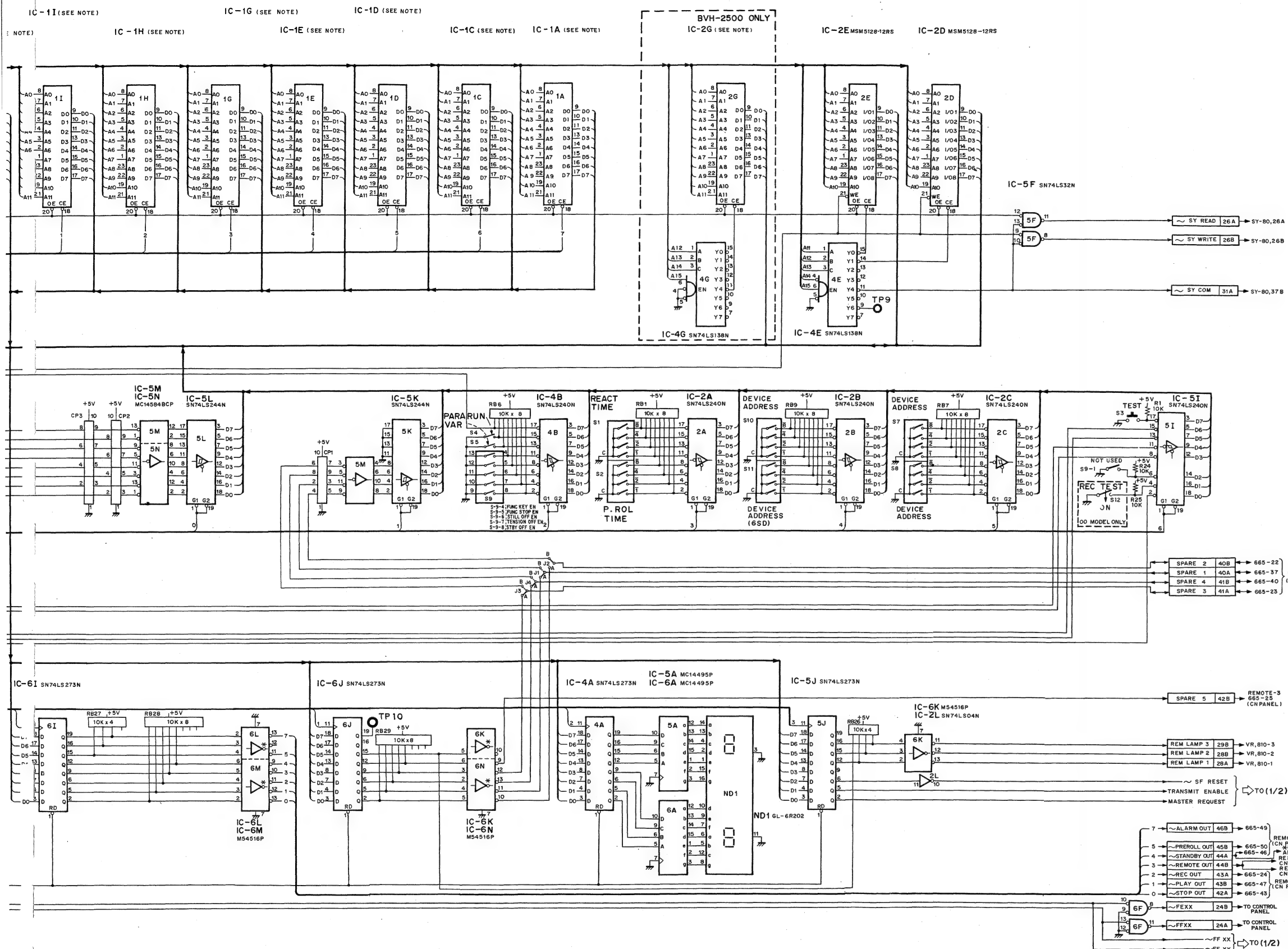
SY-79 BOARD (2/2)

System Control CPU-1

BVH-2180/PS/PM
BVH-2000/PS/PM
C-45
C-50
C-51

C-49

C-50



NOTE; EPROM

REF. No.	TYPE No.		
	BVH-2000/PS/PM BVH-2180/PS/PM	BVH-2500	BVH-2500M
IC-1A	*2732-7703-5	2732-77C2	2732-77D1
IC-1C	2732-7603-6	2732-76C2	2732-76D1
IC-1D	2732-7503-5	2732-75C2	2732-75D1
IC-1E	2732-7403-5	2732-74C2	2732-74D1
IC-1G	2732-7303-5	2732-73C2	2732-73D1
IC-1H	2732-7203-5	2732-72C2	2732-72D1
IC-1I (W3SC)	2732-7103-5	2732-71C2	----
IC-1I (PS/P)	2732-71A3-5	----	2732-71D1
IC-1I (PM)	2732-71B3-5	----	----
IC-1J	2732-7003-6	2732-70C2	2732-70D1
IC-1K	NOT USED	*2732-70C2	2732-70D1

*:IC-2G is added to the BVH-2500 with serial No. shown below.

Japan;	#10201 and up
US/Canada;	#10301 and up

*:IC-1A is added to the BVH-2000/2180 series with serial No. shown below.

```

BVH-2000
Japan;          #35401 and up
US/Canada;     #35701 and up
PM;            #30701 and up
PS;            #35501 and up

BVH-2180
Japan;          #11001 and up
US/Canada;     #11101 and up
PM;            #10001 and up
PS;            #10801 and up

```

SY-79 BOARD (2/2)

BOARD NO.1-606-683-11,12 & UP

BOARD NO. 1-606-683-11, 12 & UP
BVH-2000(J); # 10001-
BVH-2000(U/C); # 10001-
BVH-2000 PS; # 10001-
BVH-2000 PM; # 10001-
BVH-2180(J); # 10001-
BVH-2180(U/C); # 10001-
BVH-2180 PS; # 10001-
BVH-2180 PM; # 10001-

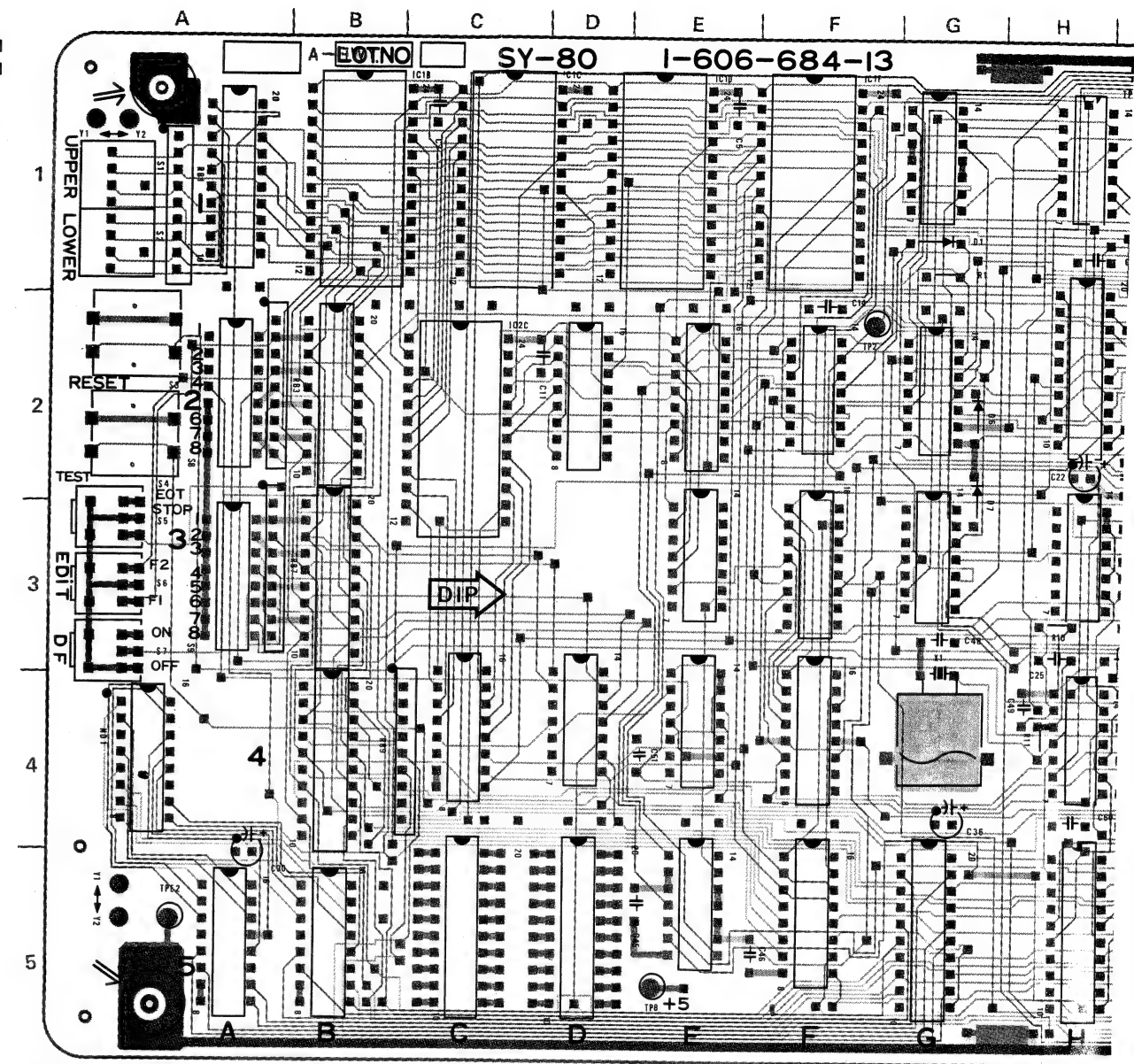
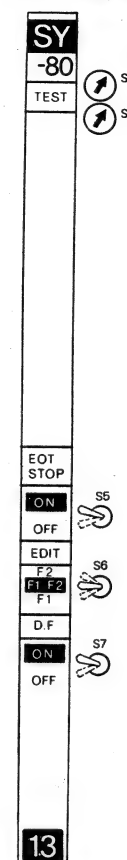
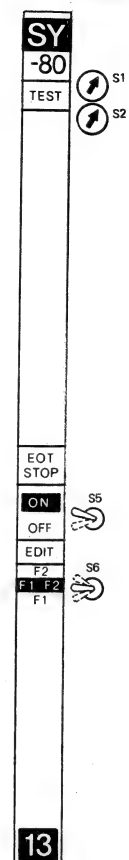
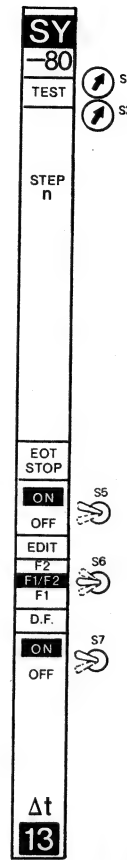
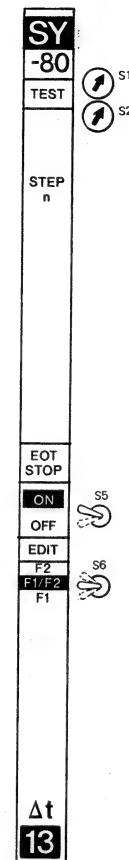
BVH-2500(J); #10001-
BVH-2500(U/C); #10001-
BVH-2500P; #10001-

SY-80 BOARD (1-606-684-13)

Component Side

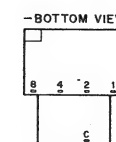
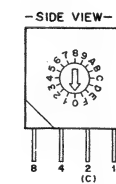
BVH-2500P

BVH-2500

BVH-2000PS
BVH-2180PSBVH-2000/PM
BVH-2180/PM

1-606-684-13 COMPONENT SIDE

S1, 2.



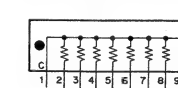
TYPE S-1011



POSITION	PIN NO.
0	8 4 2 1
1	
2	
3	
4	
5	
6	
7	
8	
9	
A	
B	
C	
D	
E	
F	

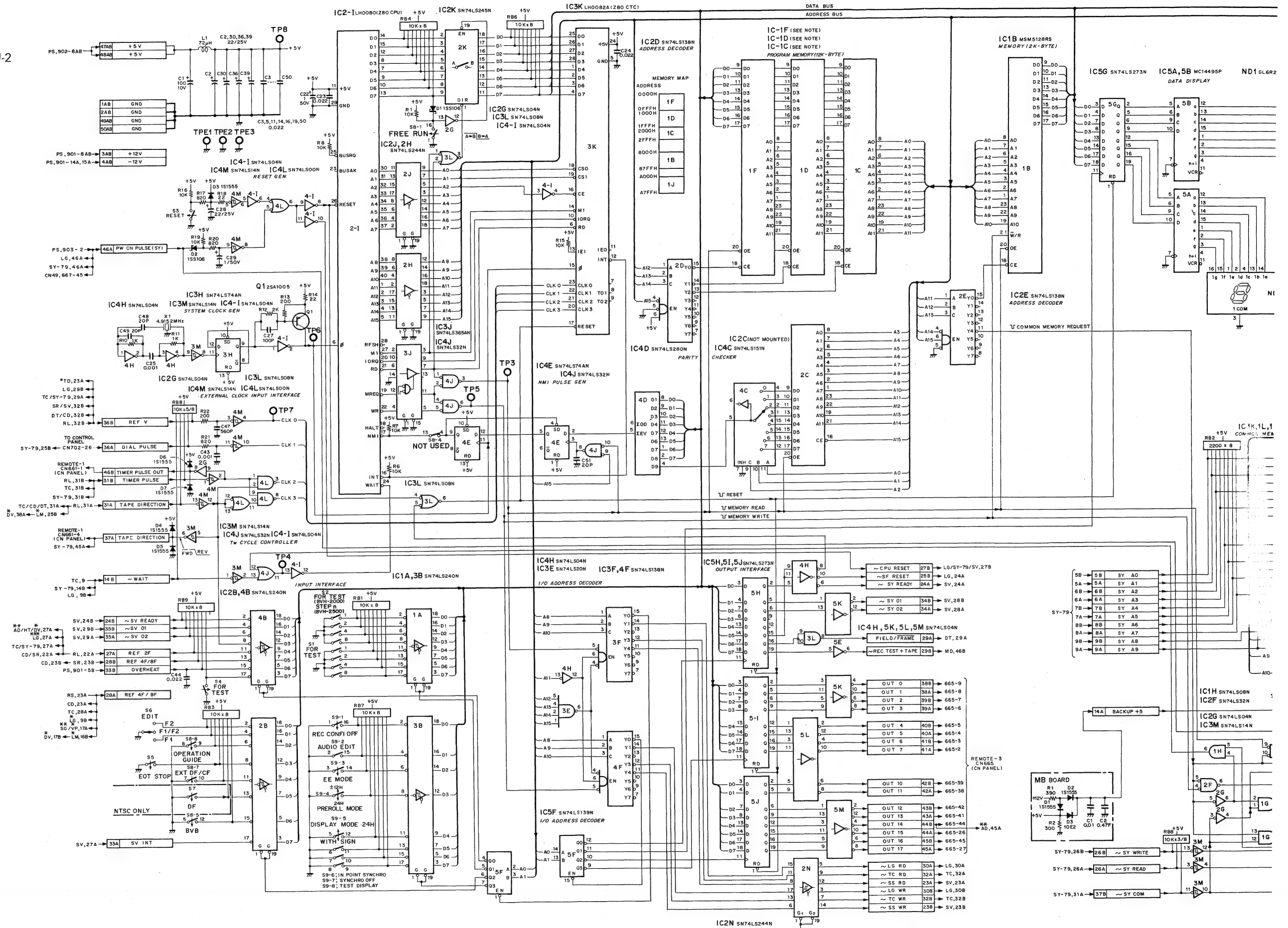
O = ON

RB1, 2, 3, 4, 5, 6, 7, 8, 9



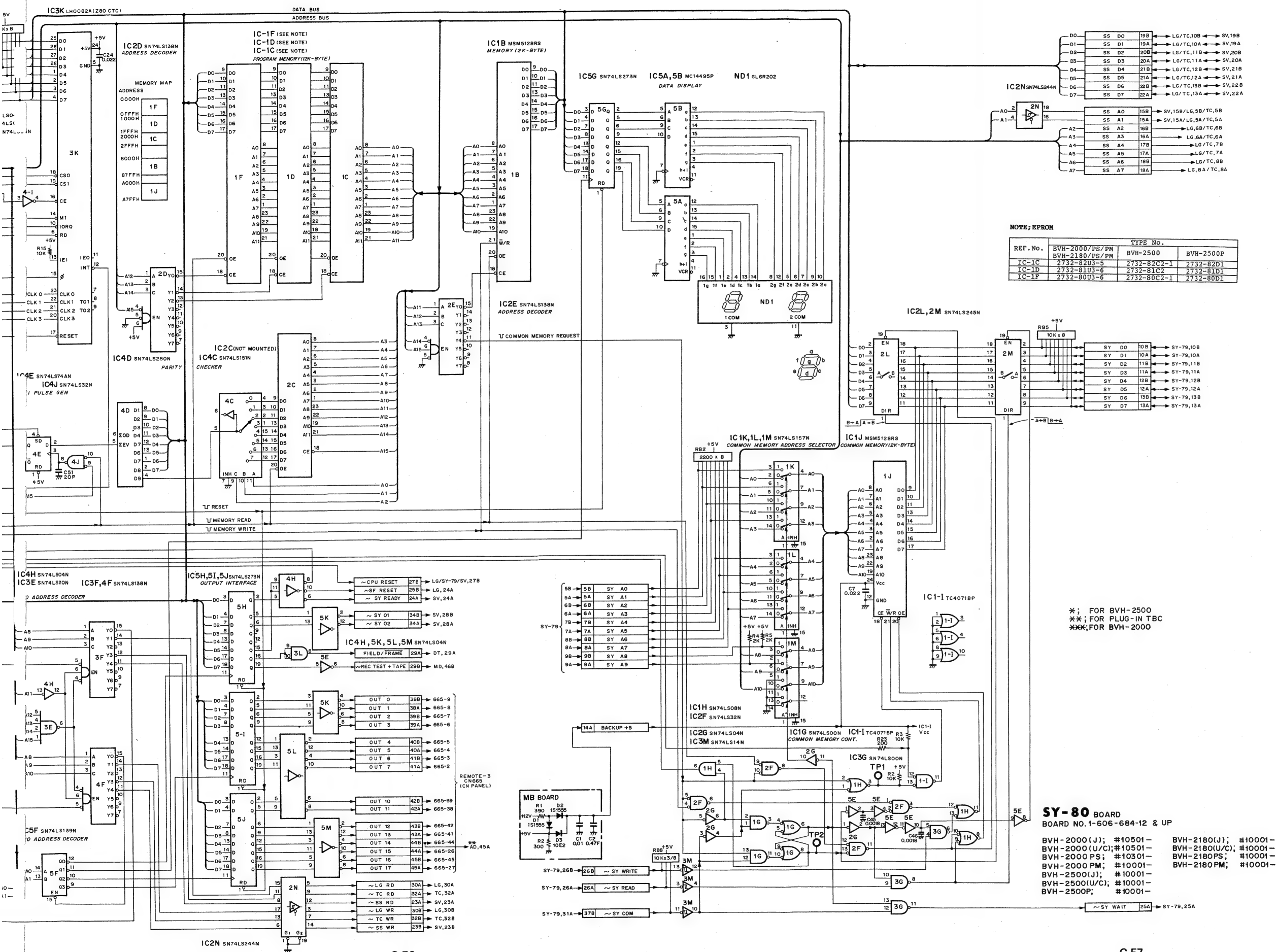
SY-80 BOARD

System Control CPU-2



C-55

C-56



SY-80 BOARD
BOARD NO. 1-606-684-12 & UP

BVH-2000(J);	#10501-	BVH-2180(J);	#10001-
BVH-2000(U/C);	#10501-	BVH-2180(U/C);	#10001-
BVH-2000PS;	#10301-	BVH-2180PS;	#10001-
BVH-2000PM;	#10001-	BVH-2180PM;	#10001-
BVH-2500(J);	#10001-		
BVH-2500(U/C);	#10001-		
BVH-2500P;	#10001-		

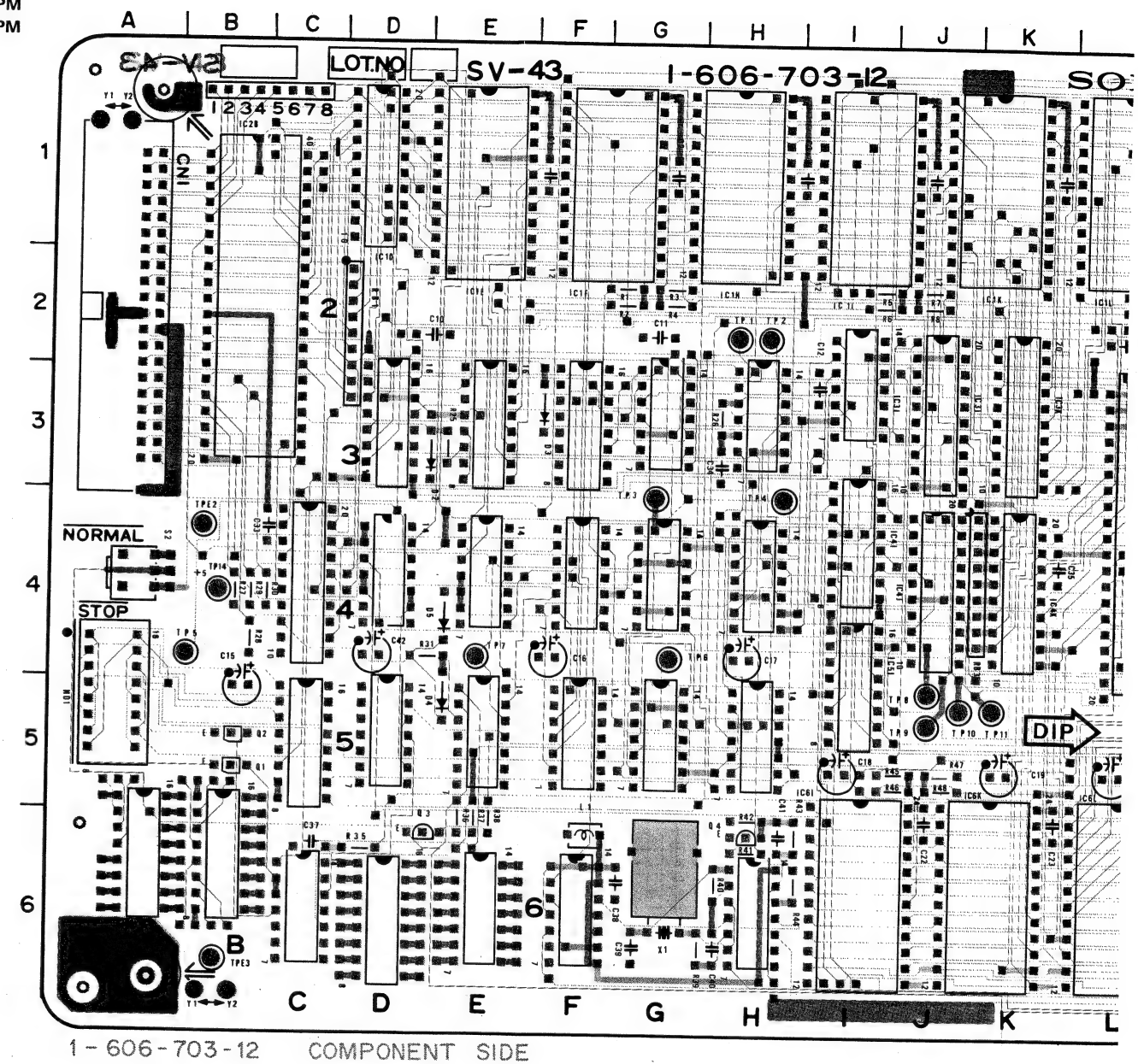
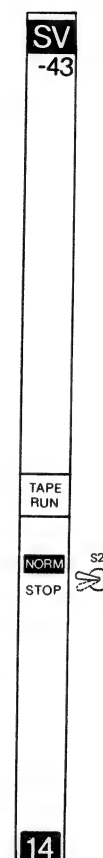
C-57

SV-43 BOARD (1-606-703-12)

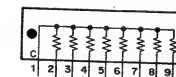
Component Side

BVH-2500/P

BVH-2000/PS/PM
BVH-2180/PS/PM



RB1, 2, 3, 4, 5



BVH-2500/P

BVH-2000/PS/PM
BVH-2180/PS/PM

SV
-43

TAPE
RUN

NORM
STOP

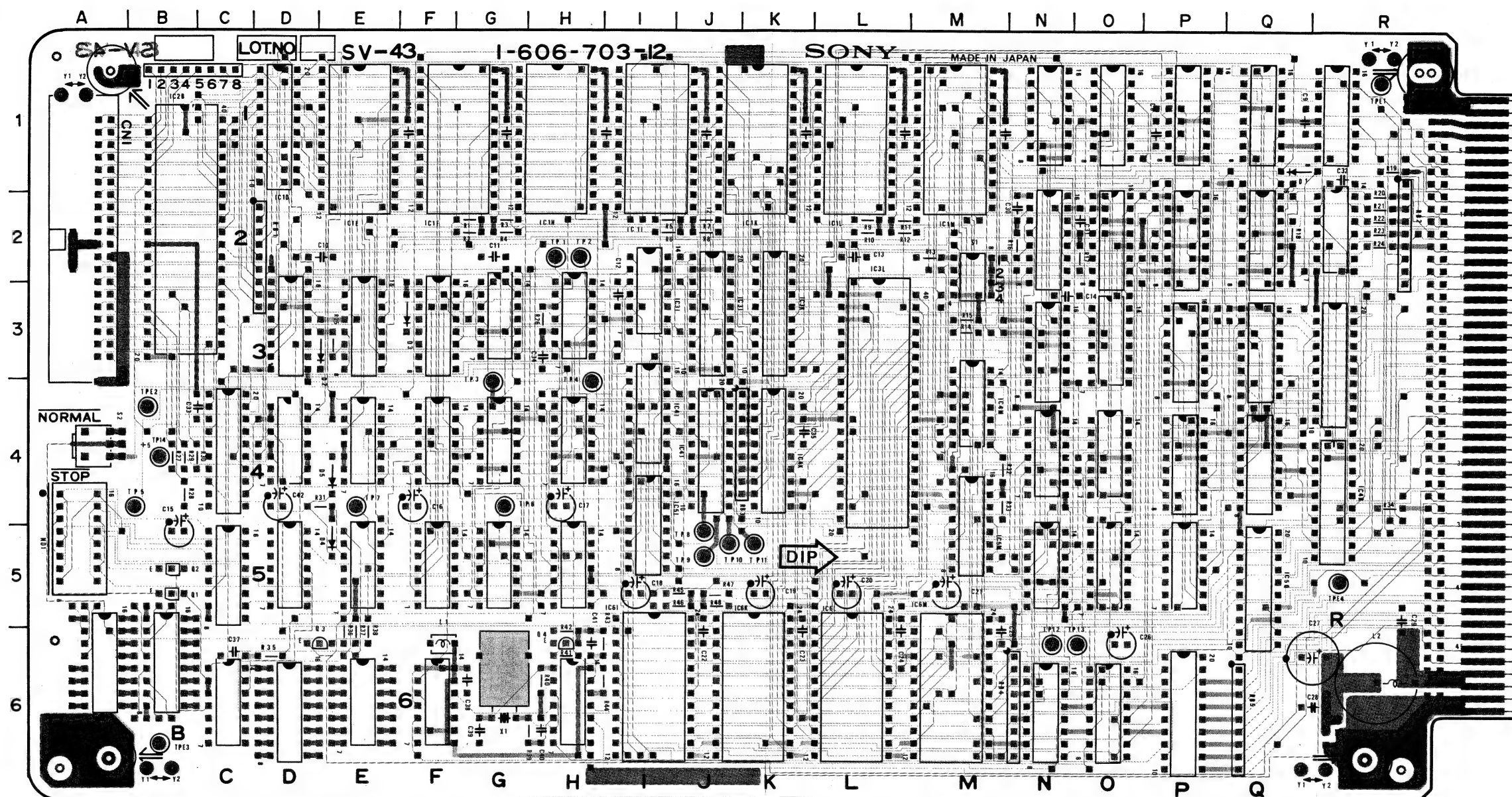
Δt
14

SV
-43

TAPE
RUN

NORM
STOP

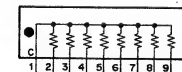
14



1-606-703-12 COMPONENT SIDE

1-606-703-12

RB1, 2, 3, 4, 5



SV-43 (1-606-703-12 & UP)

BVH-2000/PS/PM IC5F
BVH-2180/PS/PM IC5G
BVH-2500/P IC5H

CN1M 2A
D1 1Q IC5N
D2 3E IC5O
D3 3F IC5P
D4 5E IC6C
D5 4E IC6F
IC6H

IC1D IC6I
IC1E IC6K
IC1F IC6M
IC1H IC6N
IC1I IC6O
IC1M IC6P

IC1N ND1 5A
IC1O
IC1P
IC1Q Q1 5B
IC1R Q2 5B
IC2B Q3 6E
IC2N Q4 6H

IC2O RB1 2D
IC2P RB2 2R
IC2Q RB3 4K
IC2R RB4 6N
IC3D RB5 6Q

IC3F S1 2M
IC3G S2 4A

IC3H
IC3I TP1 2H
IC3J TP2 2H
IC3K TP3 4G
IC3L TP4 4H
IC3N TP5 4B
IC3O TP6 4G
IC3P TP7 4E

IC3Q TP8 5J
IC3R TP9 5J
IC4C TP10 5J
IC4D TP11 5K
IC4E TP12 6N
IC4F TP13 6O
IC4H TP14 4B

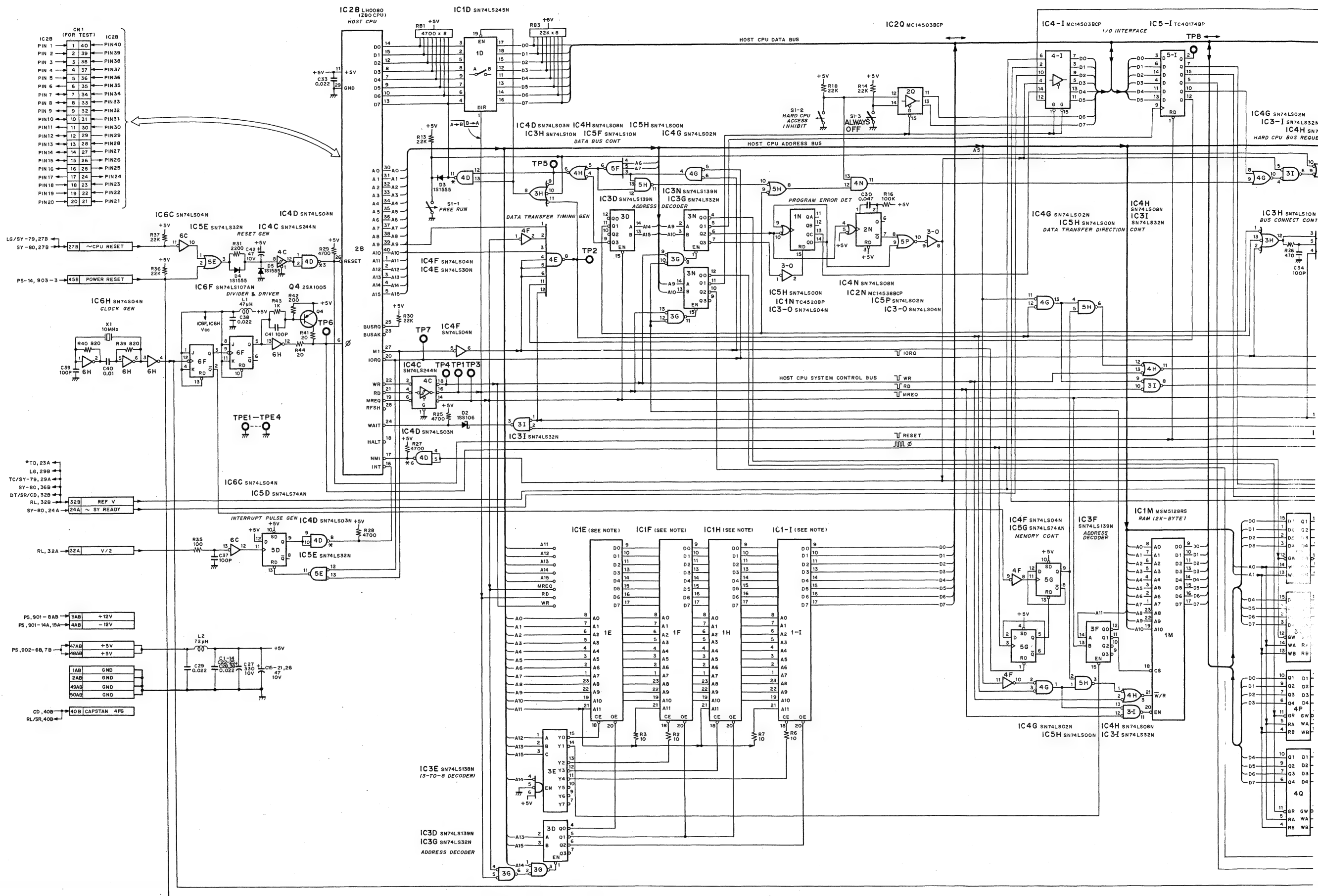
IC4I TPE1 1R
IC4J TPE2 4B
IC4K TPE3 6B
IC4M TPE4 5R
IC4O X1 6G

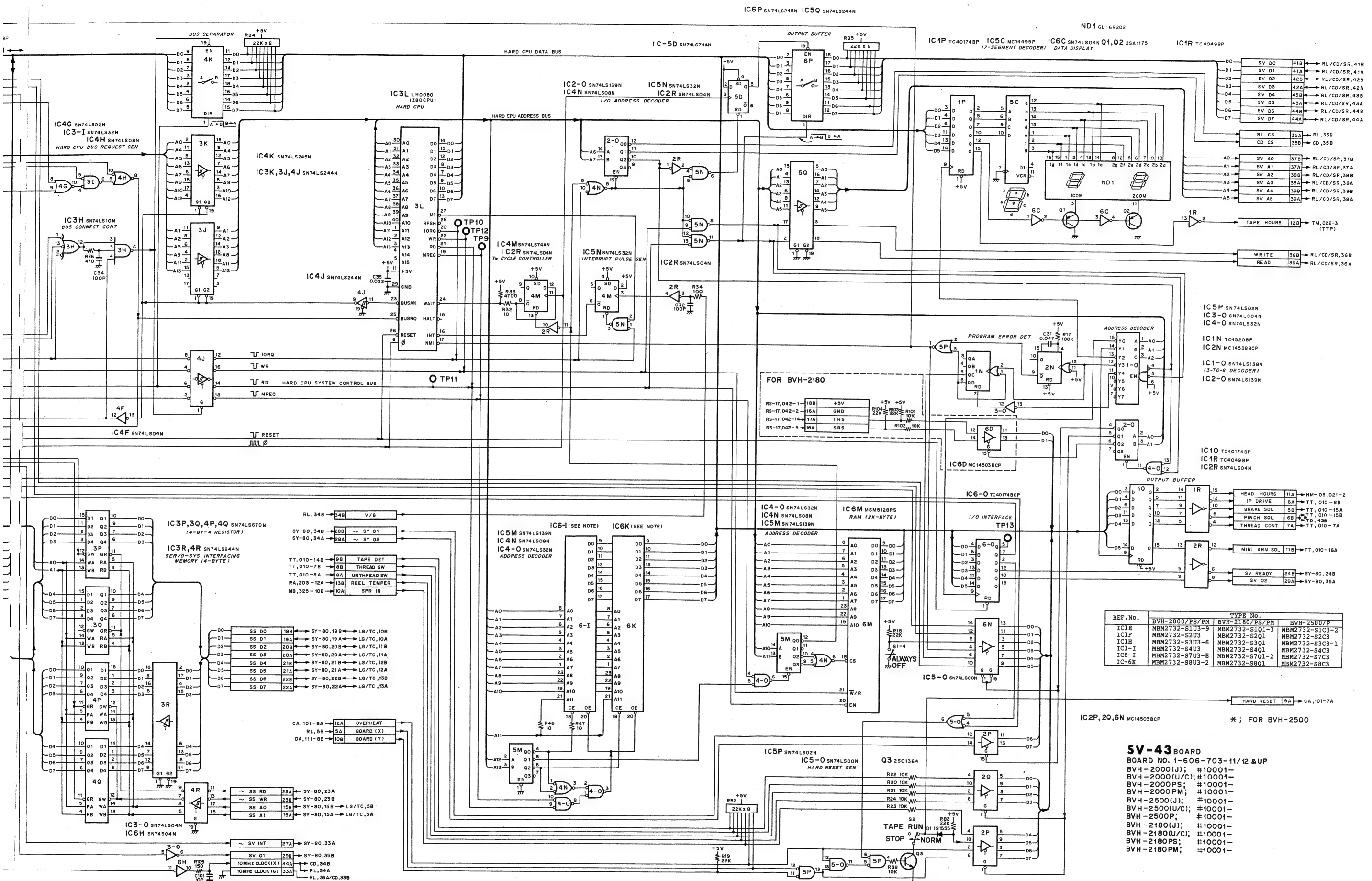
IC4P
IC4Q
IC4R
IC5C
IC5D
IC5E

SV-43 BOARD
Servo CPU

CARD RACK SV-43

SV-43 CARD RACK

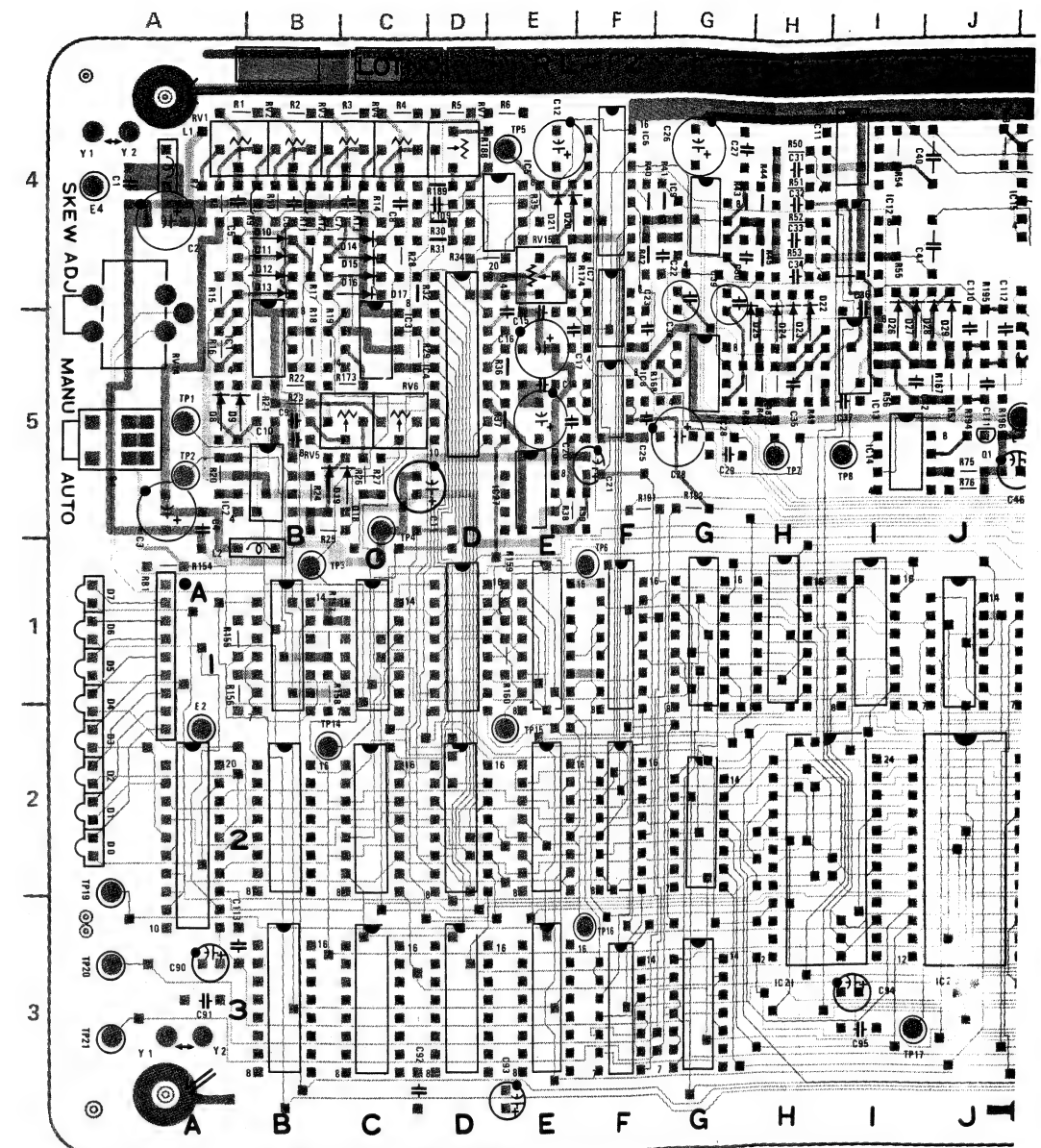
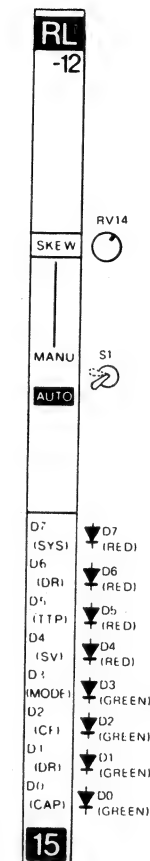
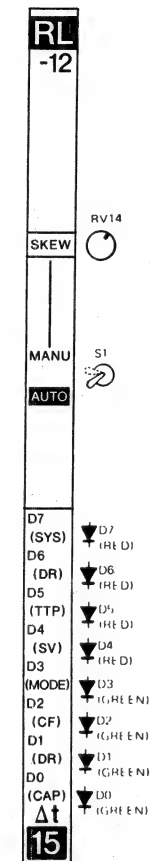




RL-12 BOARD (1-606-704-13)

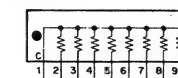
Component Side

BVH-2500P

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500

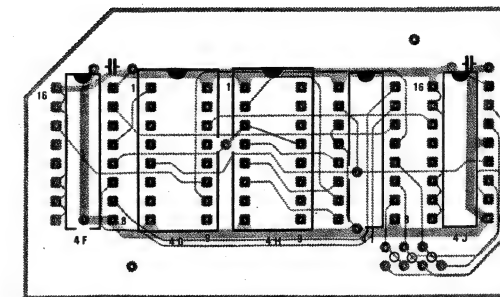
1-606-704-13 COMPONENT SIDE

RB1



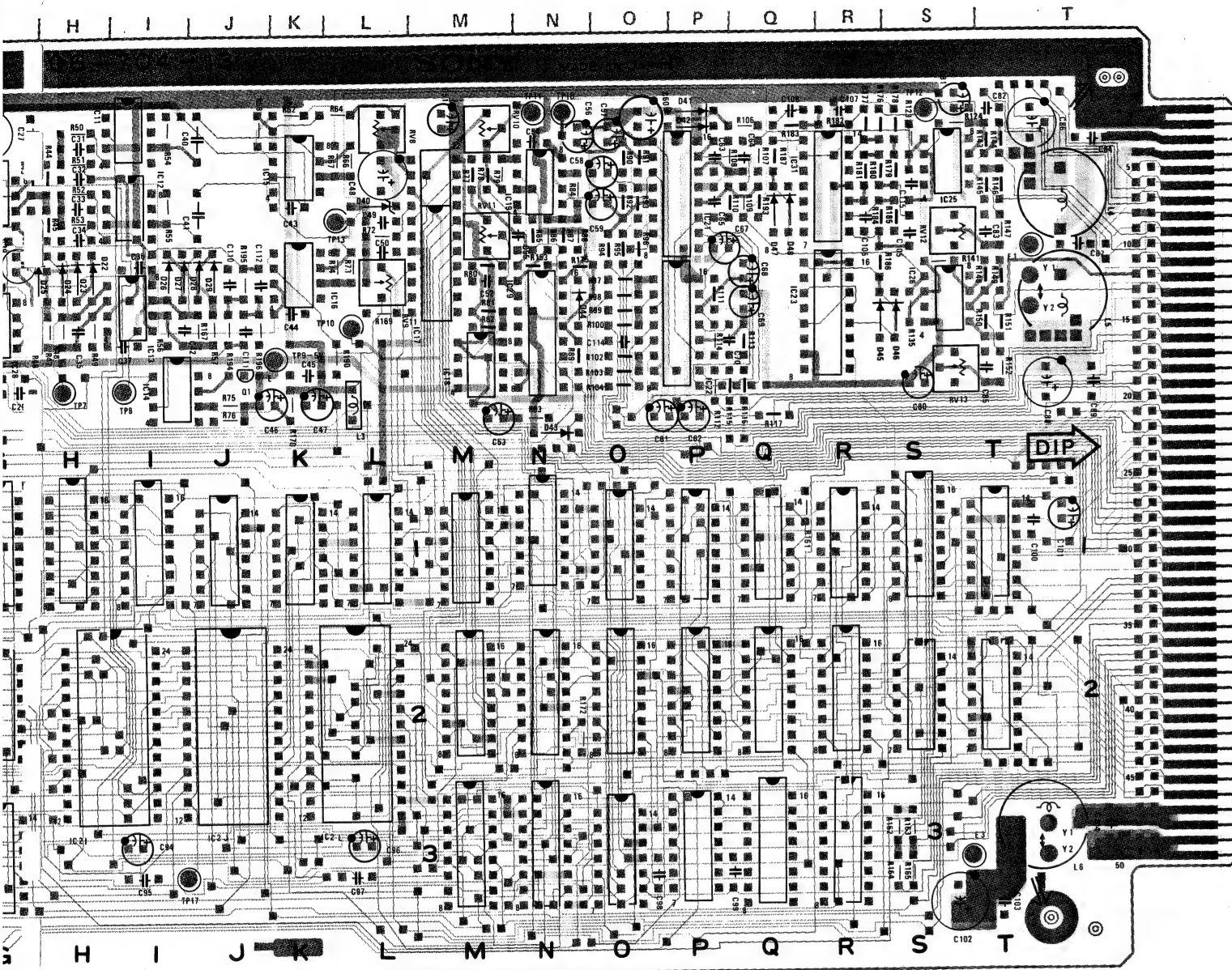
RS-20 BOARD (1-615-381-11)

Solder Side



1-615-381-11 COMPONENT SIDE

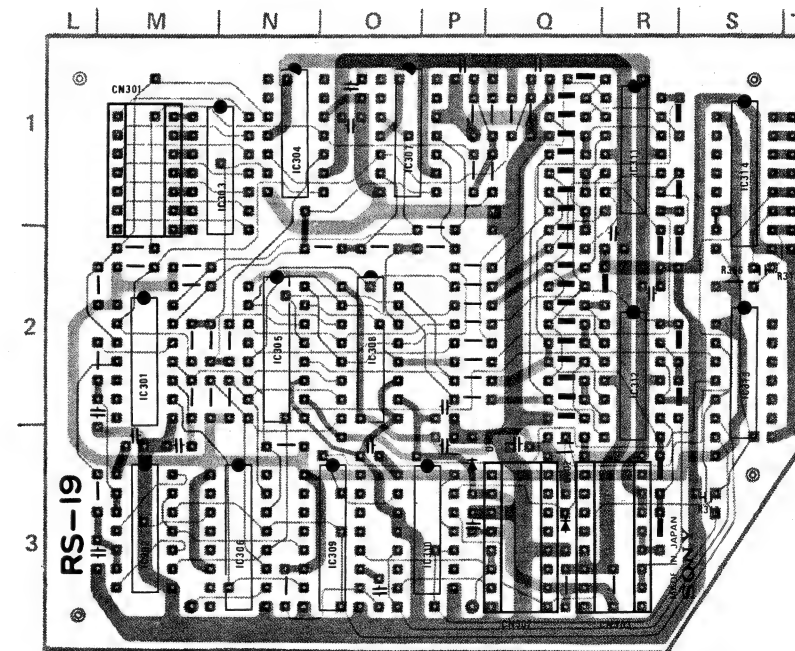
1-615-381-11 SOLDER SIDE



1-606-704-13 SOLDER SIDE

RS-19 BOARD (1-613-752-11)

Solder Side



1-613-752-11 COMPONENT SIDE

1-613-752-11 SOLDER SIDE

FOR BVH-2500P

RL-12 (1-606-704-13)

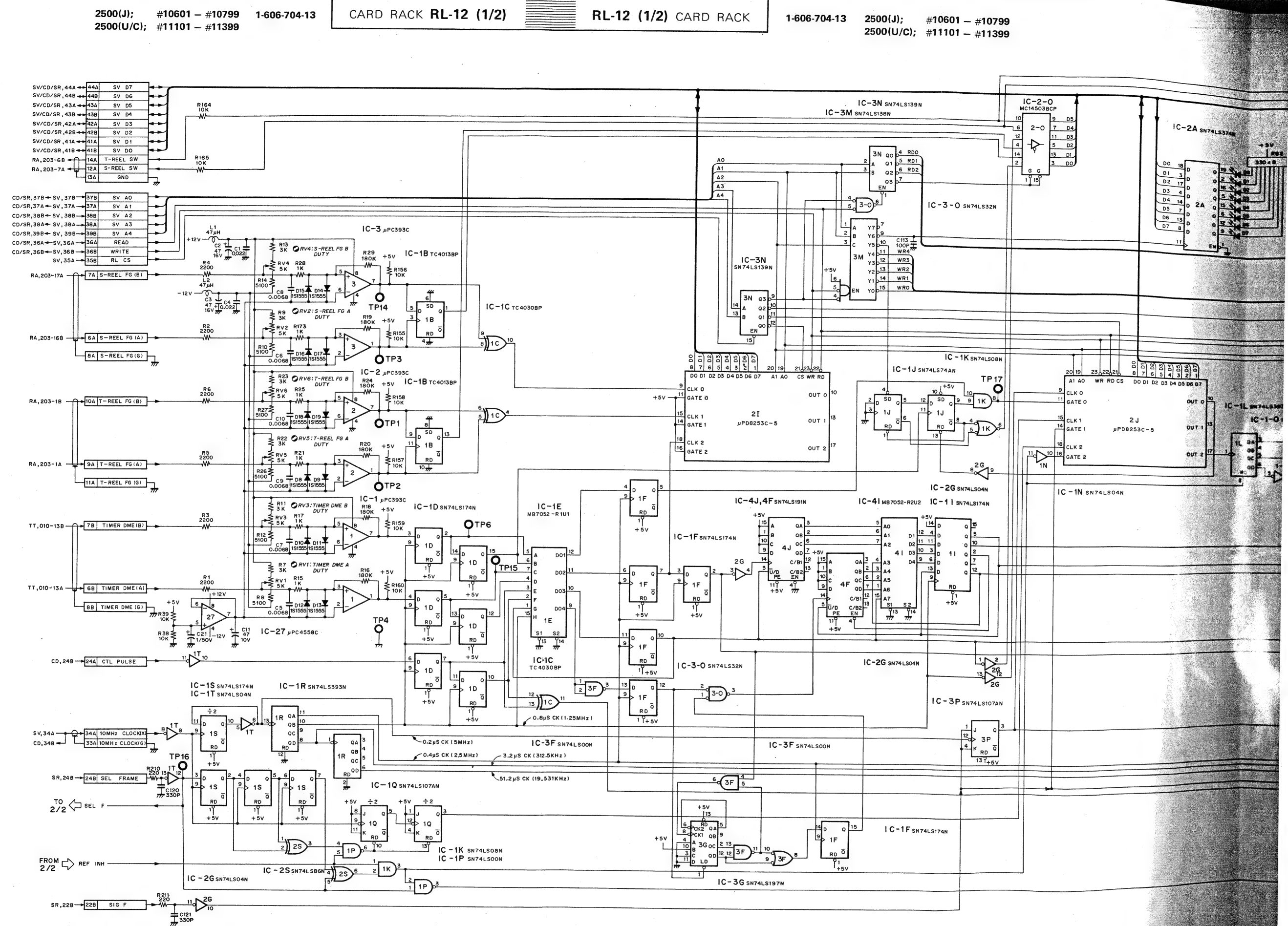
BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

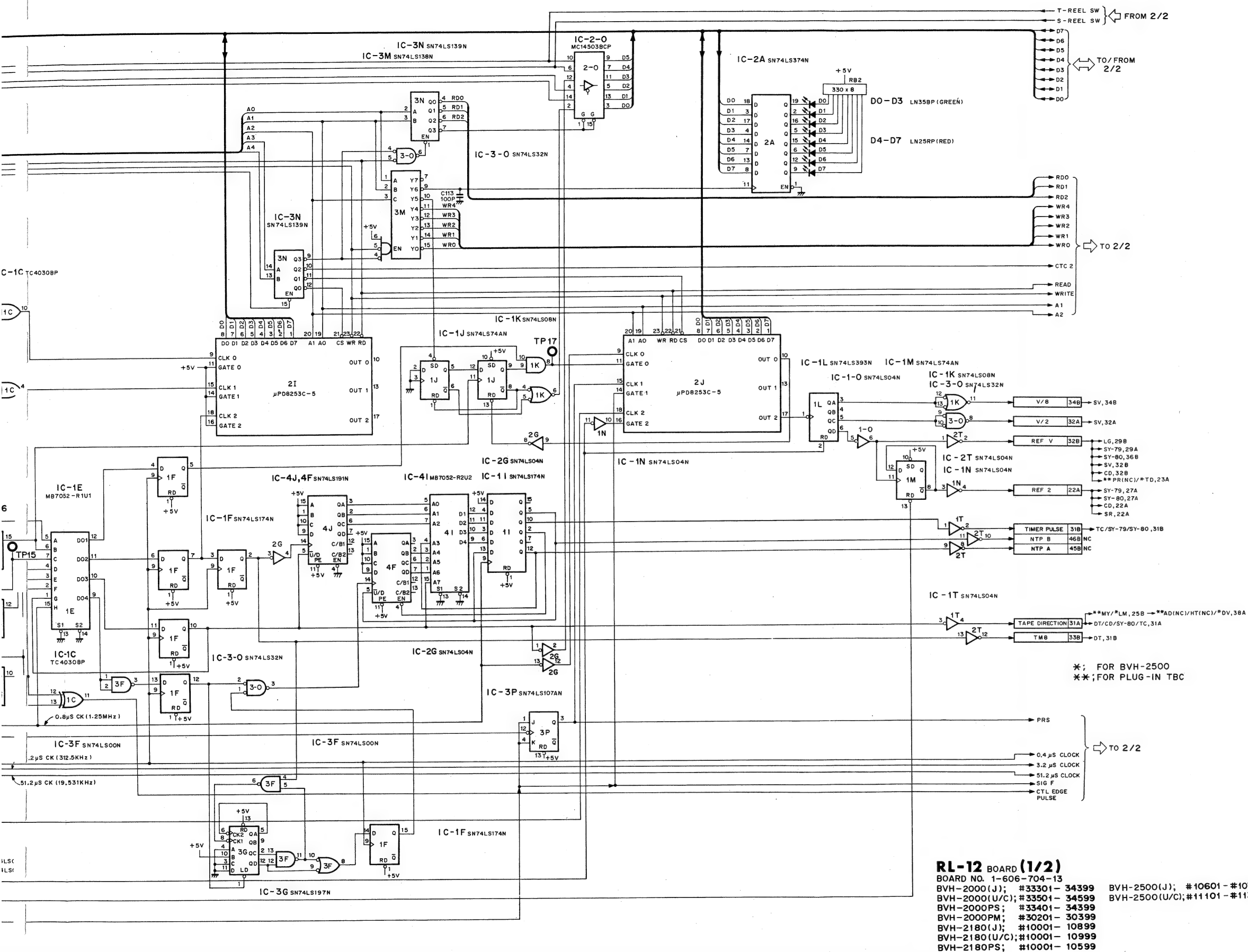
(RS-19 BOARD)	IC3 5C
CN301 1M	IC3F
CN302 3Q	IC3G
CN303 3R	IC3M
	IC3N
	IC3O
D0 2A	IC3P
D1 2A	IC4 5D
D2 2A	
D3 2A	
D4 1A	(RS-20 BOARD)
D5 1A	IC4F
D6 1A	IC4I
D7 1A	IC4J
D8 5A	
D9 5A	IC5 4E
D10 4B	IC6 4F
D11 4B	IC7 4F
D12 4B	IC8 5F
D13 4B	IC9 4G
D14 4C	IC11 4I
D15 4C	IC12 4I
D16 4C	IC13 5I
D17 4C	IC14 5I
D18 5C	IC15 4K
D19 5B	IC16 5K
D20 4E	IC17 5M
D21 4E	IC18 5M
D22 5H	IC19 4M
D23 5H	IC21 4P
D24 5H	IC22 5P
D25 5H	IC23 5R
D26 5I	IC25 4S
D27 5I	IC26 5S
D28 5J	IC27 5E
D29 5J	IC28 5G
D40 4I	IC29 5N
D43 5M	IC31 4R
D44 5N	
D45 5S	(RS-19 BOARD)
D46 5S	IC301 2M
D47 4Q	IC302 2M
D48 4Q	IC303 1N
D50 5H	IC304 1N
D51 5H	IC305 2N
	IC306 3N
(RS-19 BOARD)	IC307 1P
D301 3P	IC308 2Q
	IC309 3Q
	IC310 3P
E1 4T	IC311 1R
E2 2A	IC312 2R
E3 3T	IC313 2S
E4 4A	IC314 1S
IC1 5B	Q1 5J
IC1B	
IC1C	
IC1D	(RS-19 BOARD)
IC1E	Q302 3Q
IC1F	
IC1G	
IC1H	RB1 1A
IC1I	
IC1J	RV1 4A
IC1K	RV2 4B
IC1L	RV3 4C
IC1M	RV4 4C
IC1N	RV5 5C
IC1O	RV6 5C
IC1P	RV7 4D
IC1Q	RV8 4L
IC1R	RV9 5L
IC1S	RV10 4M
IC1T	RV11 4M
IC2 5B	RV12 4S
IC2A	RV13 5S
IC2C	RV14 5A
IC2D	RV15 4E
IC2E	RV20 4Q
IC2F	
IC2G	S1 5A
IC2I	
IC2J	TP1 5A
IC2L	TP2 5A
IC2M	TP3 1B
IC2N	TP4 5C
IC2O	TP5 4E
IC2P	TP6 1F
IC2Q	TP7 5H
IC2R	TP8 5I
IC2S	TP9 5K
IC2T	TP10 5L
	TP11 4N
	TP12 4S
	TP13 4L
	TP14 2B
	TP15 2E
	TP16 3F
	TP17 3I
	TP18 4N
	TP19 2A
	TP20 3A
	TP21 3A

2180 M BVH-2000/PS/PM C C-70 C-71 C-107/7 C-107(6/37) C-107(5/37) -107(5/37) BVH-2500/P

RL-12 BOARD (1/2)

Reel Servo





C-70

C-71

BVH-2180/PS/PM
BVH-2000/PS/PM

C-76 C-77

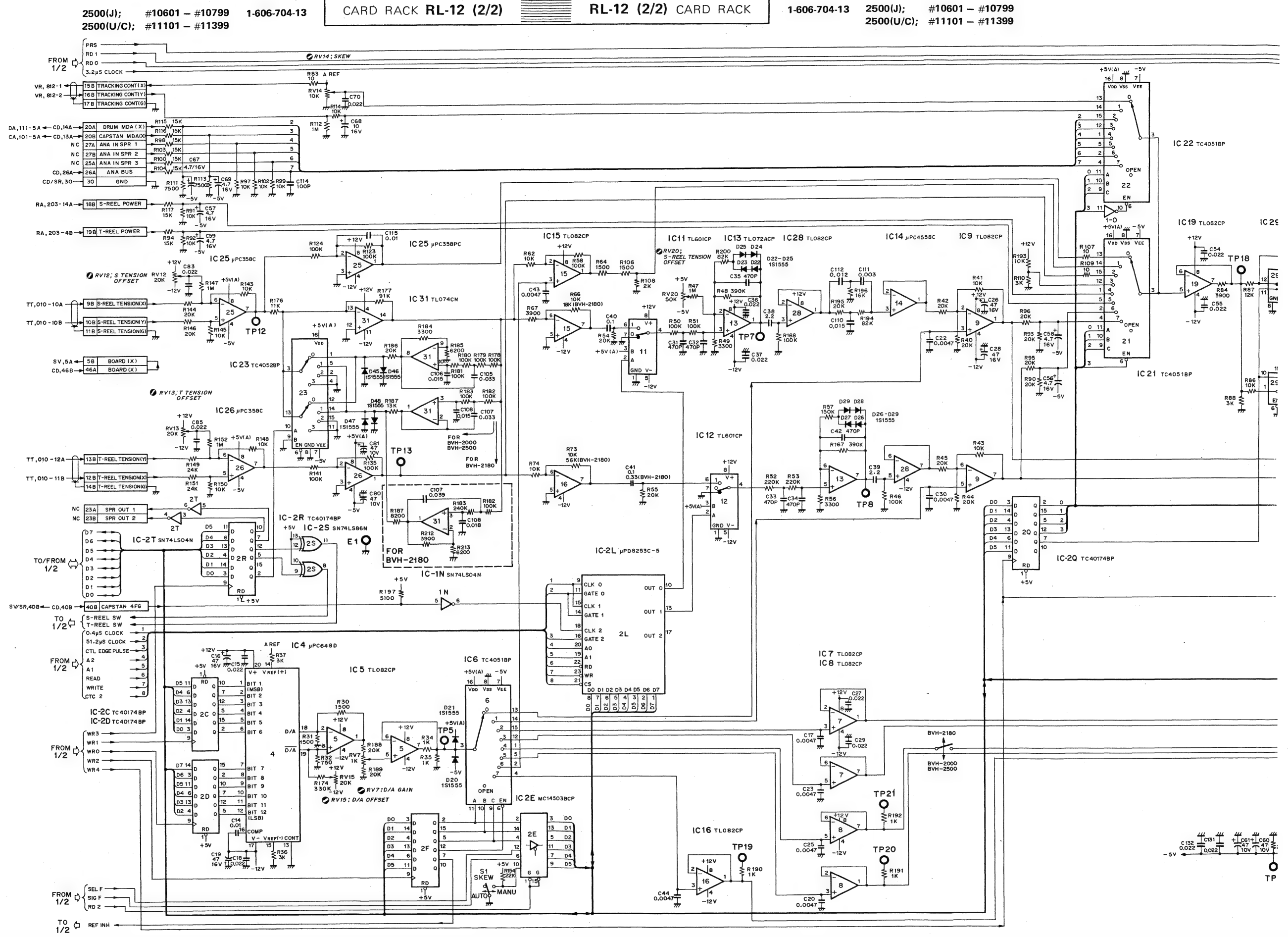
C-1' 1/37

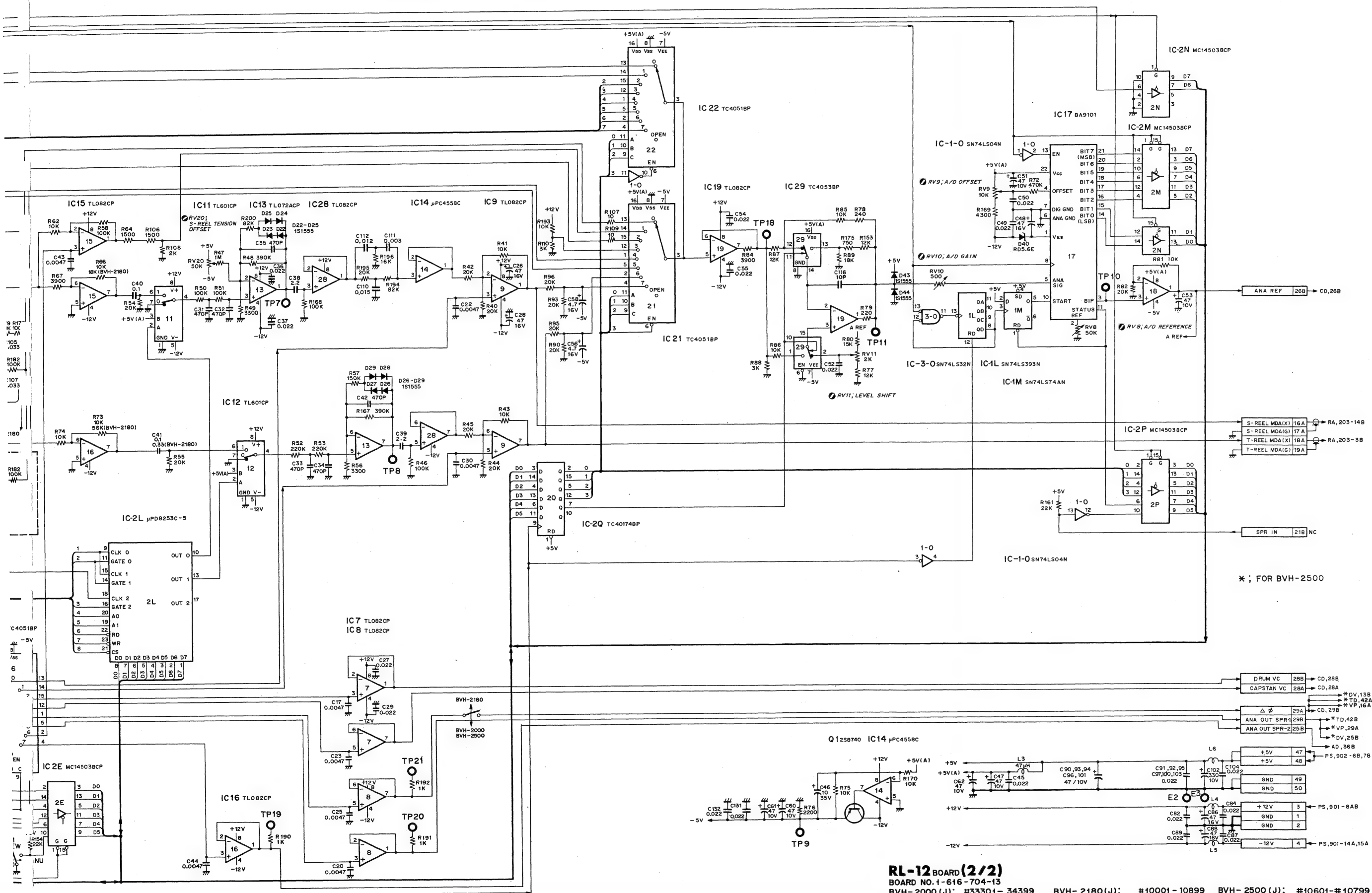
C-107(12/37)

C-107(11/37)

BVH-2500

RL-12 BOARD (2/2)
Reel Servo



**RL-12 BOARD (2/2)**

BOARD NO. 1-616-704-13

BVH-2000 (J); #33301-34399

BVH-2000 (U/C); #33501-34599

BVH-2000PS; #33401-34399

BVH-2000PM; #30201-30399

BVH-2180 (J); #10001-10899

BVH-2180 (U/C); #10001-10999

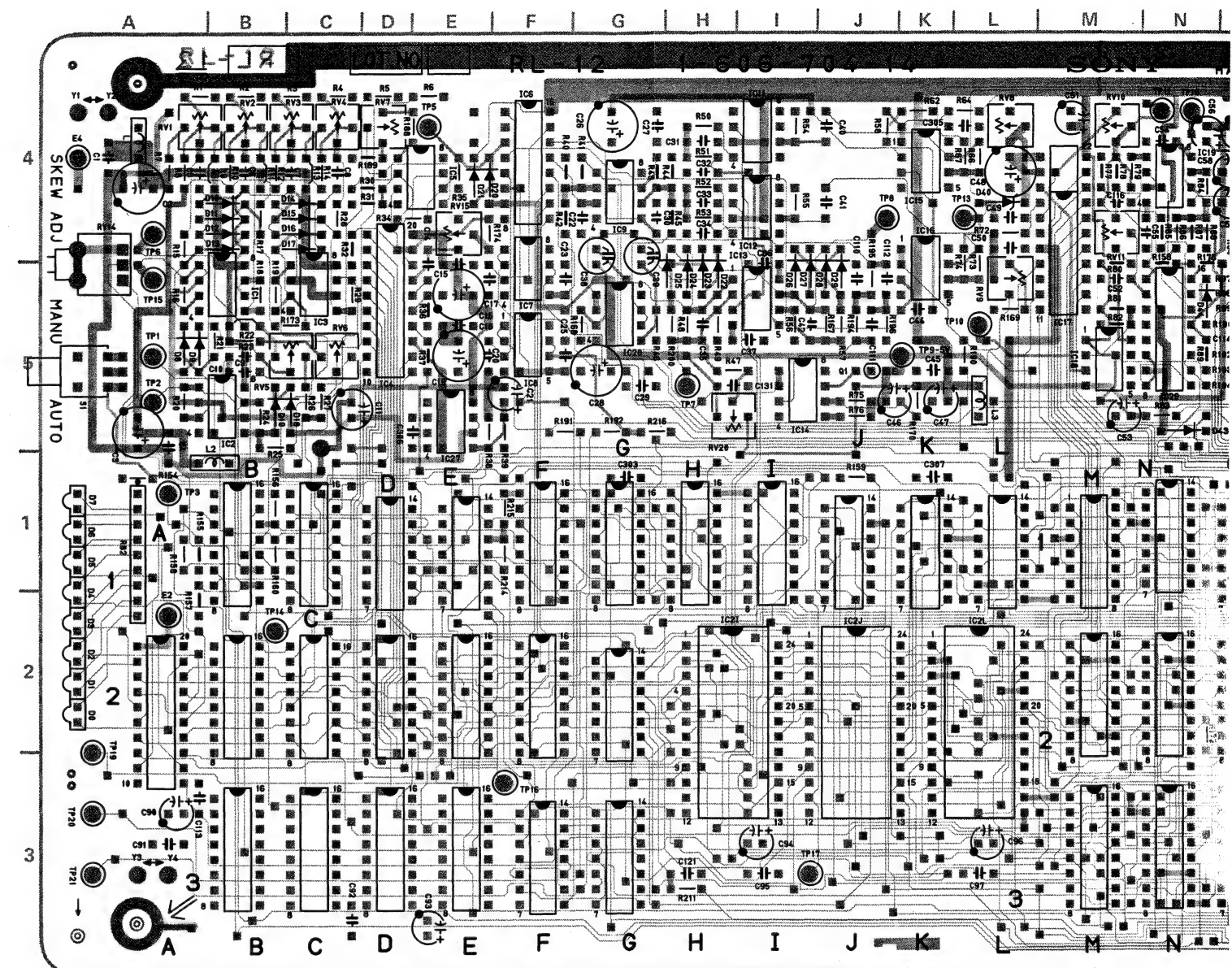
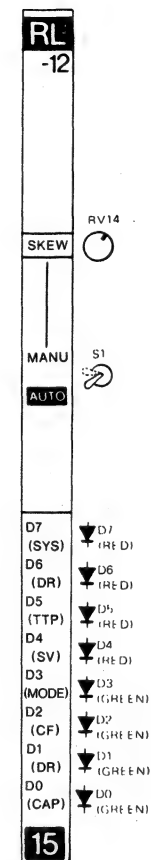
BVH-2180PS; #10001-10599

BVH-2500 (J); #10601-10799

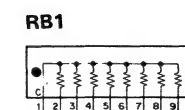
BVH-2500 (U/C); #11101-11399

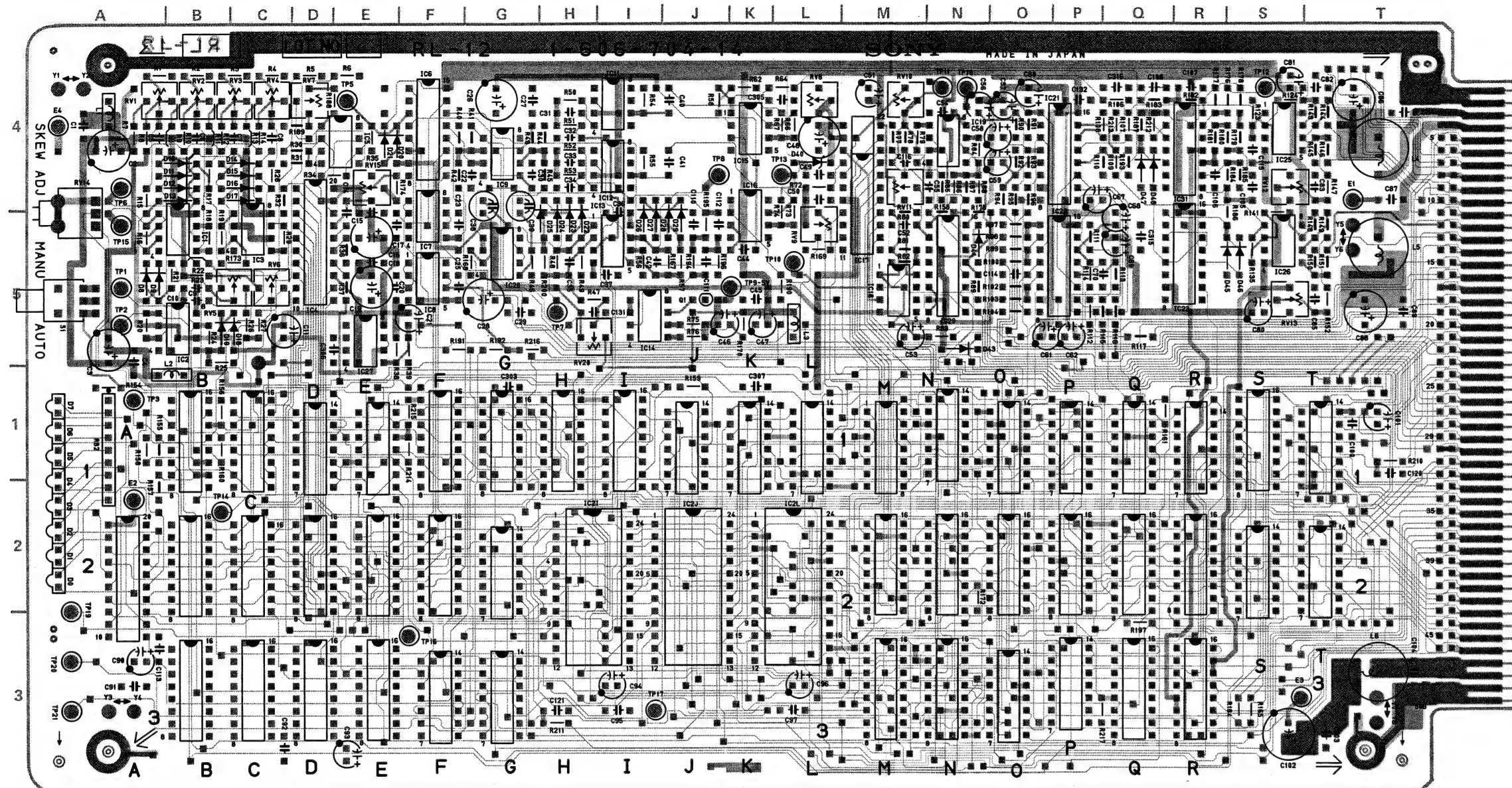
RL-12 BOARD (1-606-704-14)

Component Side



1-606-704-14 COMPONENT SIDE

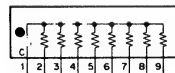




1-606-704-14 COMPONENT SIDE

1-606-704-14 SOLDER SIDE

RB1



RL-12 (1-606-704-14 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM(RS-19 BOARD)
IC3 5C
CN301 1M
IC3F
CN302 3Q
IC3G
CN303 3R
IC3M
IC3N
IC3O
IC3P

D0	2A	IC30
D1	2A	IC3P
D2	2A	IC4
D3	2A	IC5
D4	1A	IC6
D5	1A	IC7
D6	1A	IC8
D7	1A	IC9
D8	5A	IC11
D9	5A	IC12
D10	4B	IC13
D11	4B	IC14
D12	4B	IC15
D13	4B	IC16
D14	4C	IC17
D15	4C	IC18
D16	4C	IC19
D17	4C	IC21
D18	5C	IC22
D19	5C	IC23
D20	4E	IC25
D21	4E	IC26
D22	5H	IC27
D23	5H	IC28
D24	5H	IC29
D25	5H	IC31
D26	5I	
D27	5I	
D28	5J	
D29	5J	
D40	4I	
D43	5N	
D44	5N	
D45	5S	
D46	5S	
D47	4Q	
D48	4Q	
D50	5H	
D51	5H	

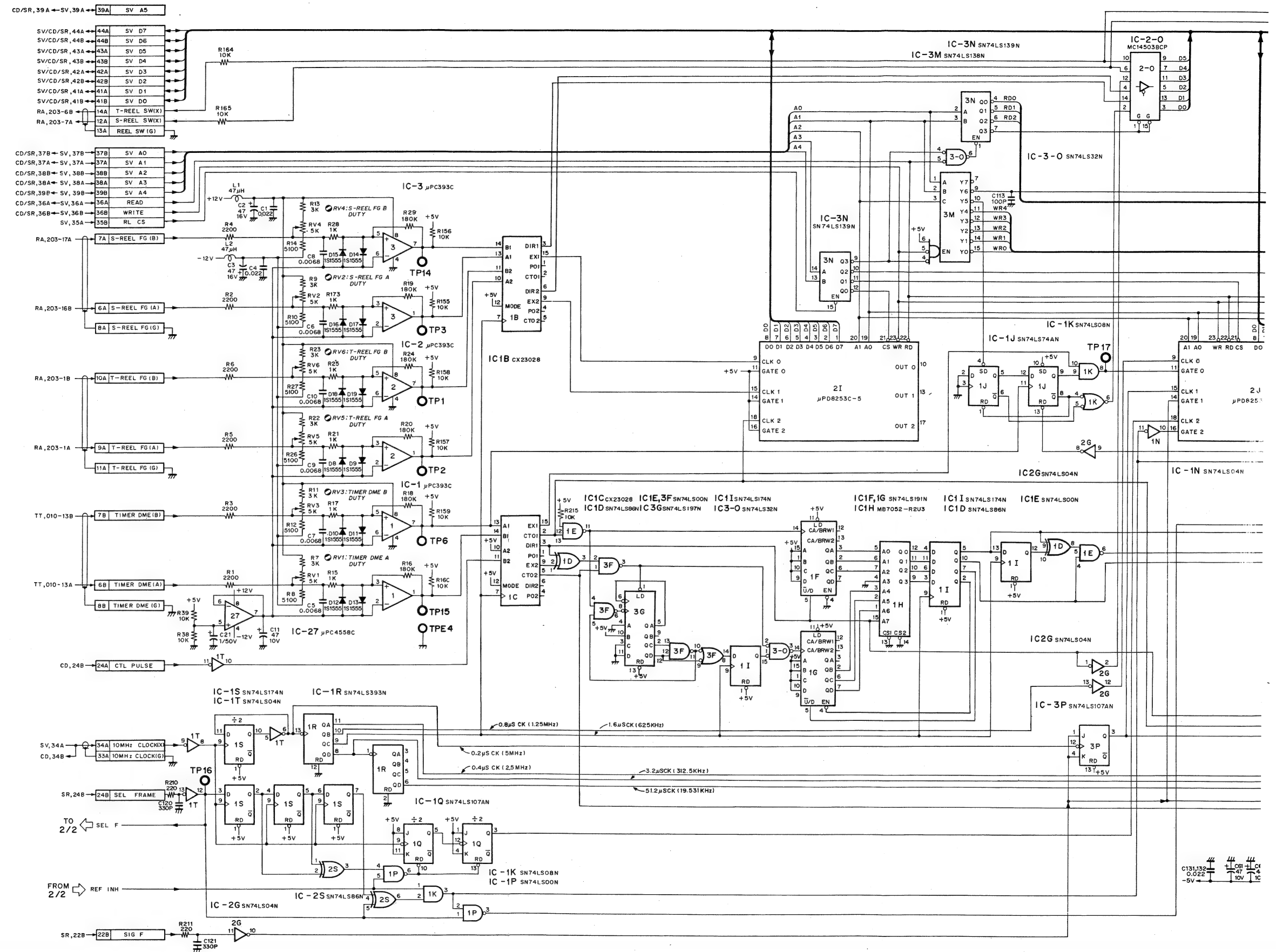
(RS-19 BOARD)	
D301	3P
D302	3Q
E1	4T
E2	2A
E3	3T
E4	4A
IC1	5B
IC1B	
IC1C	
IC1D	
IC1E	
IC1F	
IC1G	
IC1H	
IC1I	
IC1J	
IC1K	
IC1L	
IC1M	
IC1N	
IC1O	
IC1P	
IC1Q	
IC1R	
IC1S	
IC1T	
IC2	5B
IC2A	
IC2C	
IC2D	
IC2E	
IC2F	
IC2G	
IC2I	
IC2J	
IC2L	
IC2M	
IC2N	
IC2O	
IC2P	
IC2Q	
IC2R	
IC2S	
IC2T	

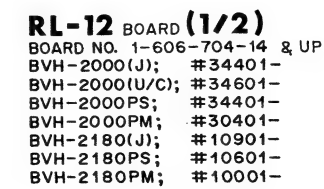
Q1	5J
RB2	1A
RV1	4A
RV2	4B
RV3	4C
RV4	4C
RV5	5C
RV6	5C
RV7	4D
RV8	4L
RV9	5L
RV10	4M
RV11	4M
RV12	4S
RV13	5S
RV14	5A
RV15	4E
RV20	5H

S1	5A
TP1	5A
TP2	5A
TP3	1B
TP5	4E
TP6	4A
TP7	5H
TP8	5J
TP9	5K
TP10	5L
TP11	4N
TP12	4S
TP13	4L
TP14	2B
TP15	5A
TP16	3F
TP17	3I
TP18	4N
TP19	2A
TP20	5A
TP21	5A

RL-12 BOARD (1/2)

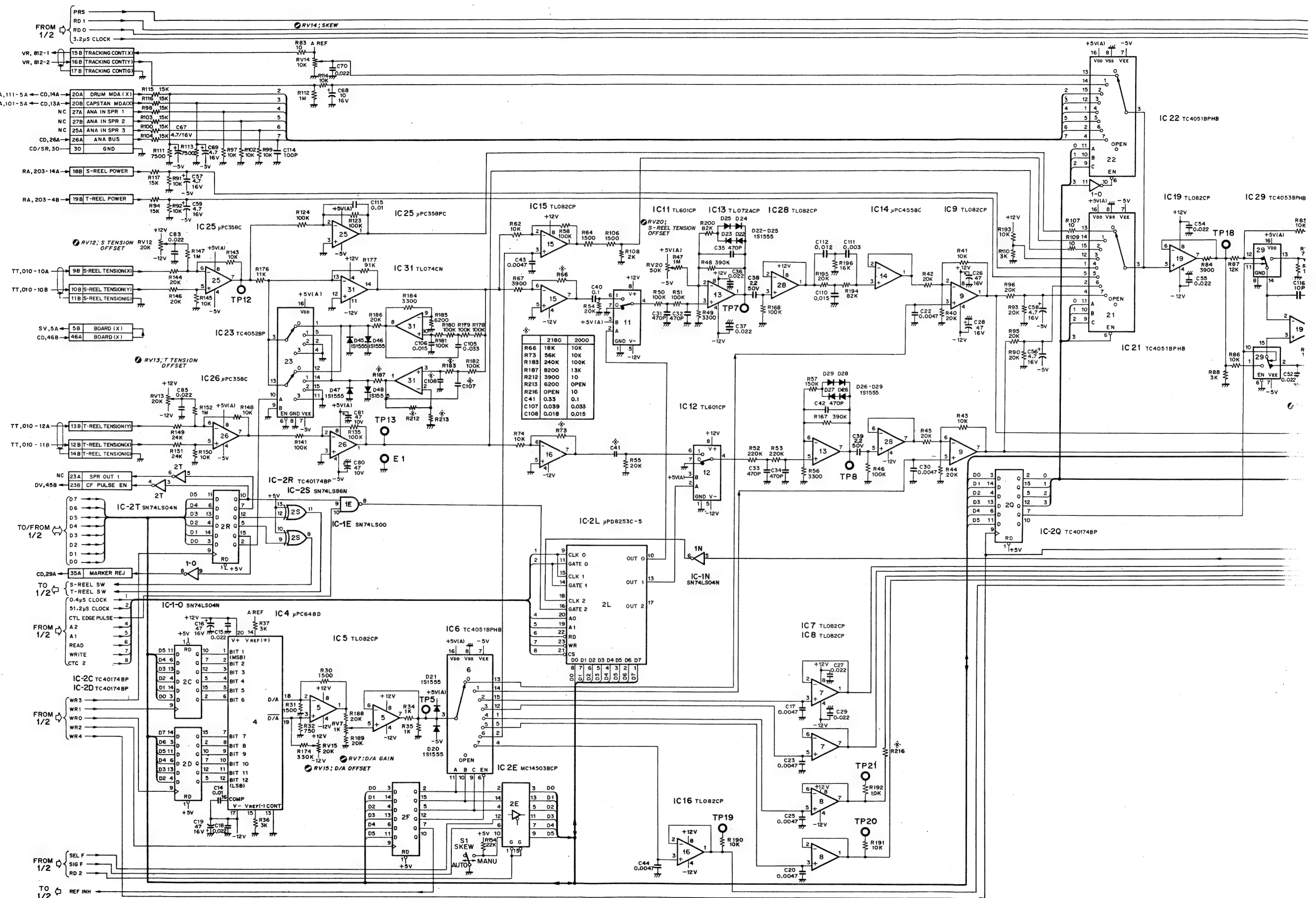
Reel Servo





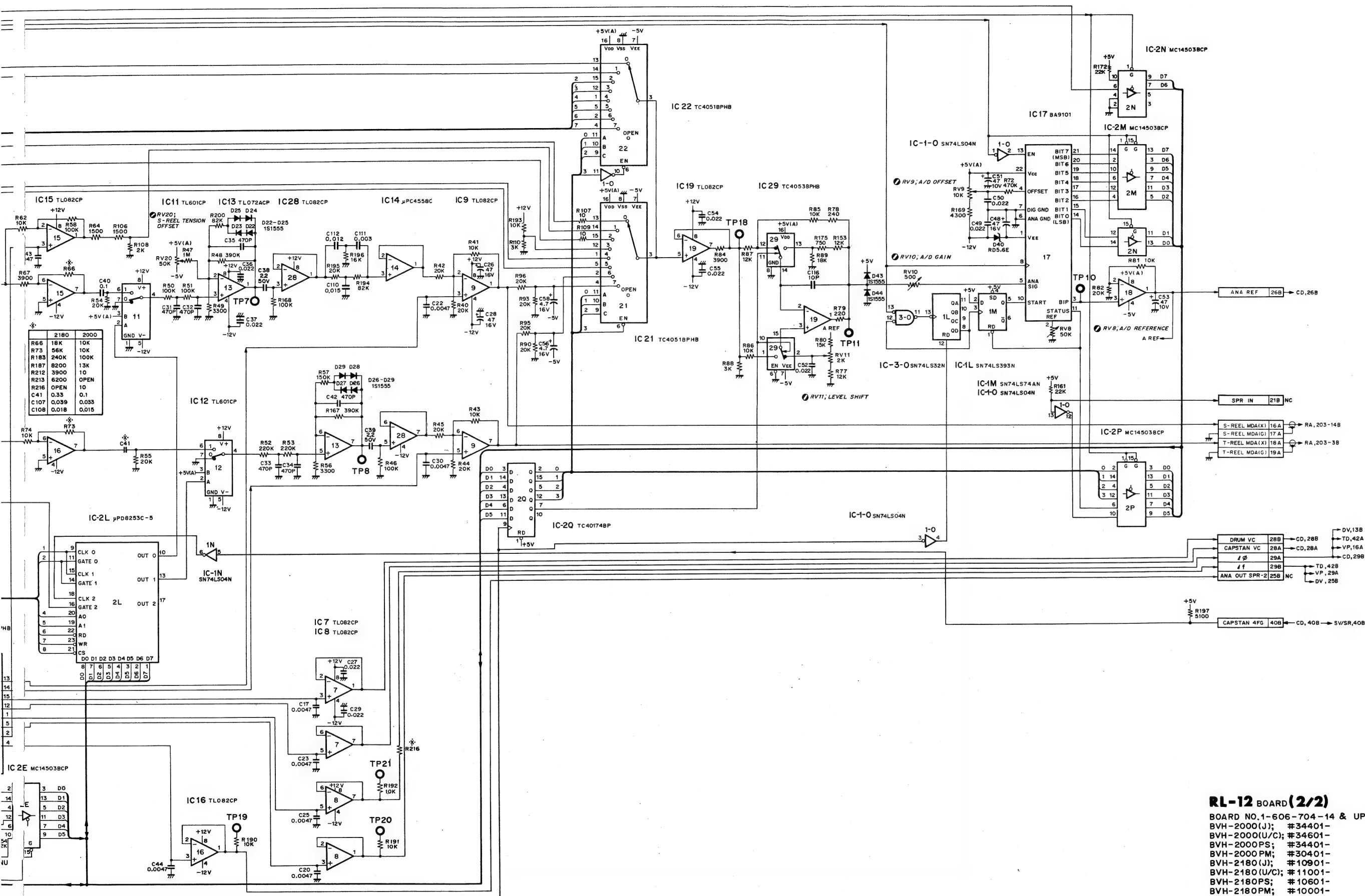
RL-12 BOARD (2/2)

Reel Servo



C-77(11/13)

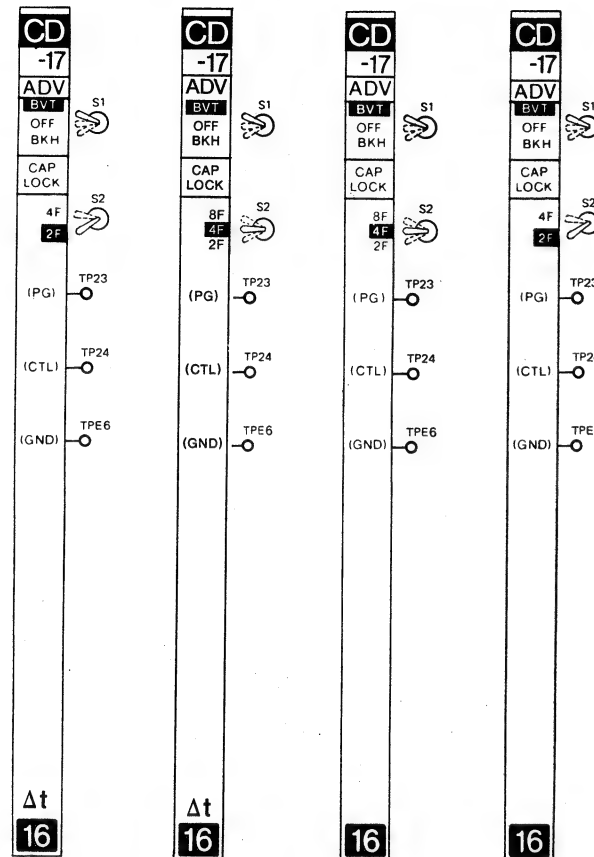
C-77(12/13)

**RL-12 BOARD (2/2)**

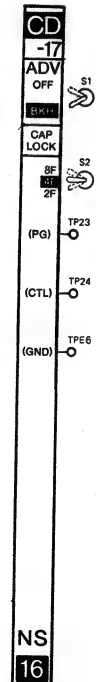
BOARD NO. 1-606-704-14 & UP
BVH-2000(J); #34401-
BVH-2000(U/C); #34601-
BVH-2000PS; #34401-
BVH-2000PM; #30401-
BVH-2180(J); #10901-
BVH-2180(U/C); #11001-
BVH-2180PS; #10601-
BVH-2180PM; #10001-

CD-17 BOARD (1-606-705-13) Component Side

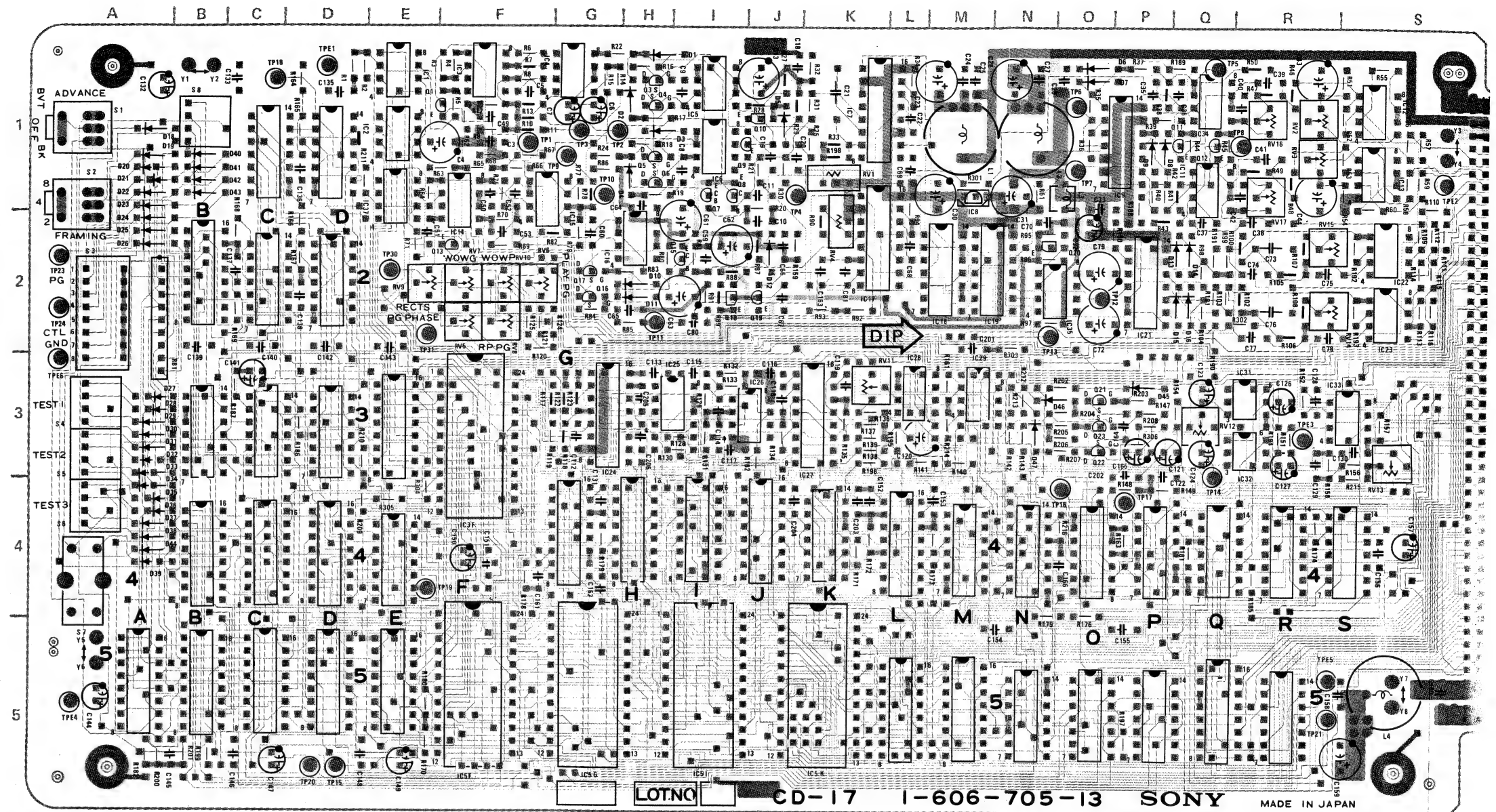
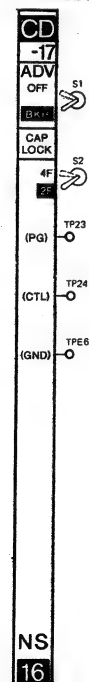
BVH-2500 BVH-2500P BVH-2000PS/PM BVH-2000
BVH-2180PS/PM BVH-2180



BVH-2000PS
(For 10/12/14 MODEL)



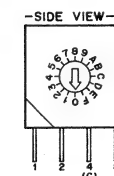
BVH-2000
(For 10/12 MODEL)



1-606-705-13 COMPONENT SIDE

1-606-705-13 SOLDER SIDE

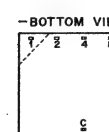
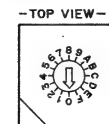
S4, 5, 6



TYPE S-1041	PIN NO.
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20	20
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100	100

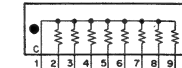
O=ON

S8



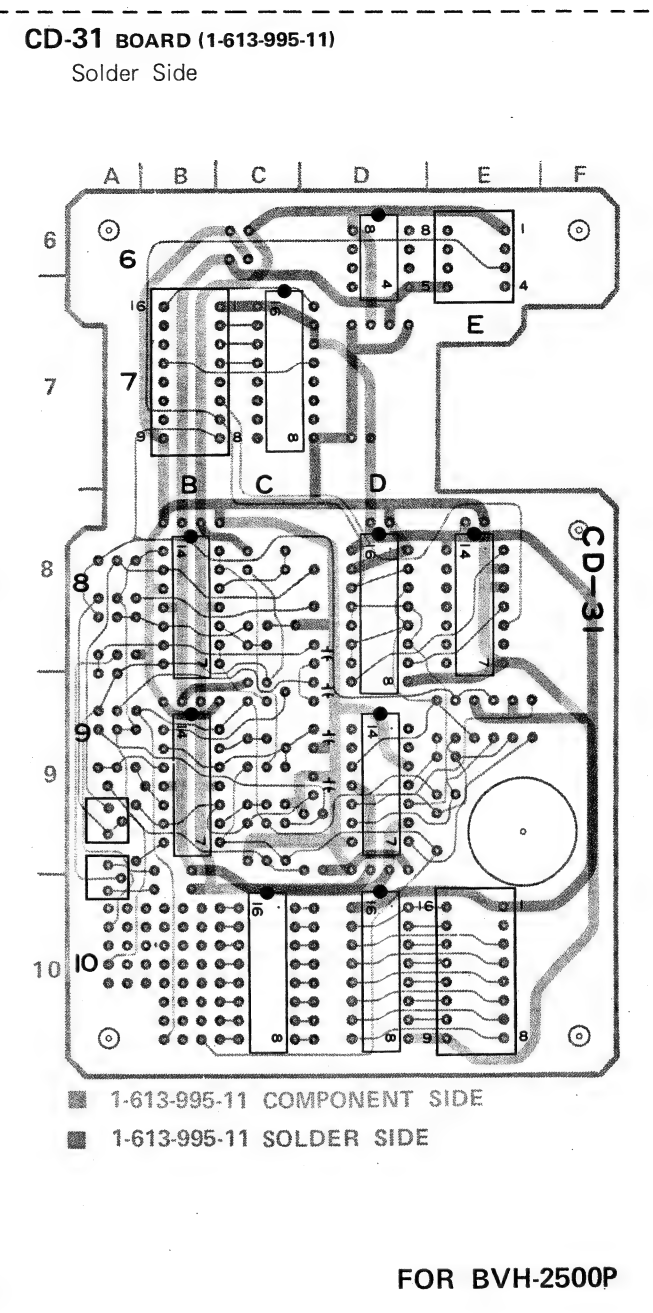
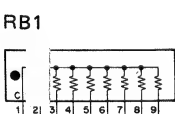
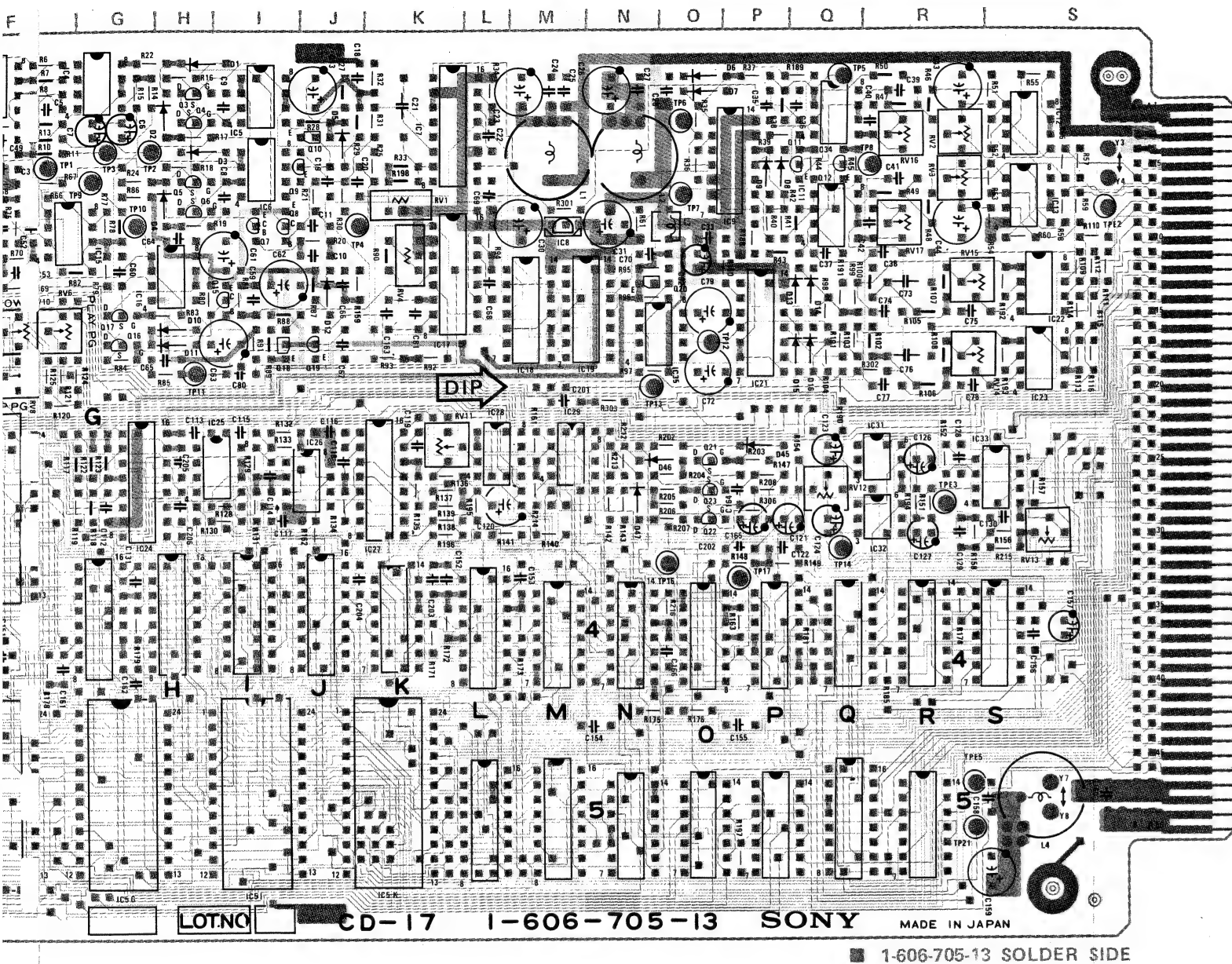
O=ON

RB1



TYPE S-1040	PIN NO.
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O=ON



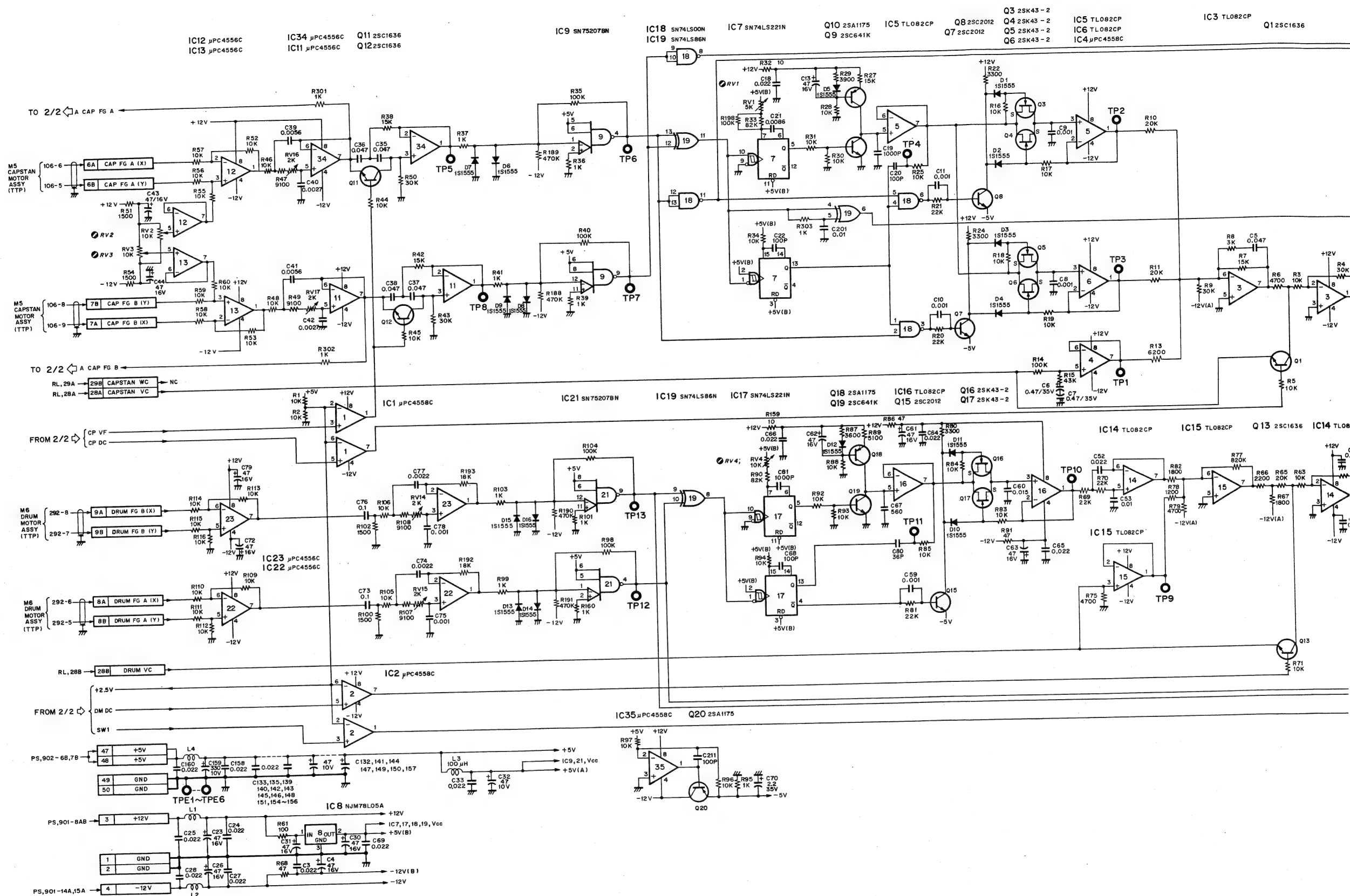
CD-17 (1-606-705-13)

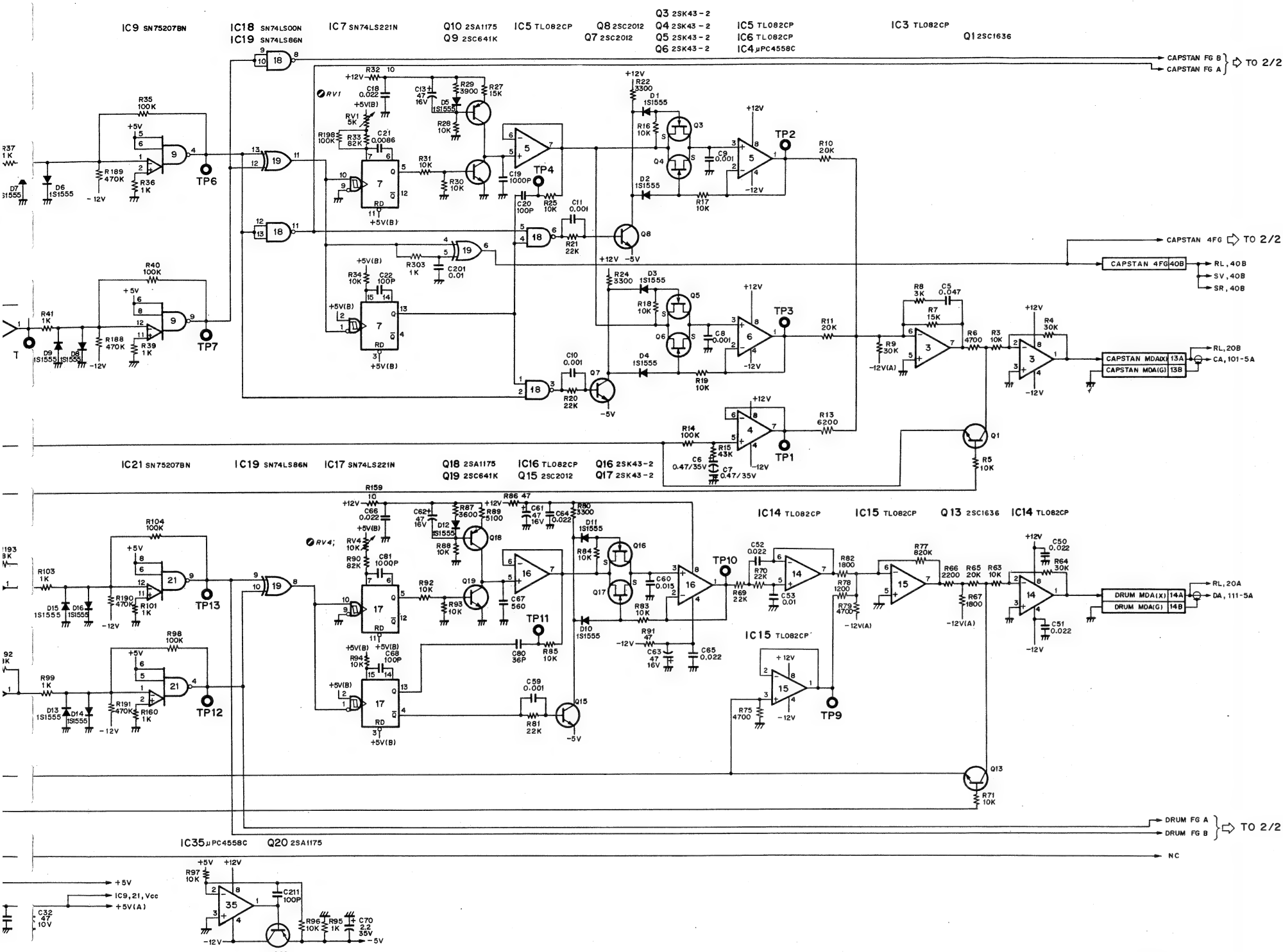
BVH-2000/PS/PM		BVH-2180/PS/PM		BVH-2500/P	
(PS/P)		IC5	11	RV1	1K
CV1	3R	IC5A		RV2	1R
		IC5B		RV3	1R
D1	1H	IC5C		RV4	2K
D2	1H	IC5D		RV5	2F
D3	1H	IC5E		RV6	2F
D4	1H			RV7	2F
D5	1J	(NTSC/PS/PM)		RV8	2F
D6	10	IC3F		RV9	2E
D7	10			RV10	2F
D8	1P	IC5G		RV11	3K
D9	1P	IC5I		RV12	30
D10	2H	IC5K		RV13	3S
D11	2H	IC5L		RV14	2R
D12	2J	IC5M		RV15	2R
D13	20	IC5N		RV16	1R
D14	20	IC5O		RV17	1R
D15	20	IC5P			
D16	20	IC5Q		(CD-31 BOARD)	
D18	1A	IC5R		RV401	9A
D19	1A	IC6	11	RV402	9A
D20	1A	IC7	1K		
D21	1A			S1	1A
D22	1A	(CD-31 BOARD)		S2	1A
D23	1A	IC7C		S3	2A
D24	2A			S4	3A
D25	2A	IC8	1M	S5	3A
D26	2A			S6	4A
D27	3A	(CD-31 BOARD)		S7	4A
D28	3A	IC8B		S8	1B
D29	3A	IC8D			
D30	3A	IC8E		TP1	1F
D31	3A			TP2	1G
D32	3A	IC9	1P	TP3	1G
D33	3A			TP4	1J
D34	4A	(CD-31 BOARD)		TP5	1Q
D35	4A	IC9B		TP6	1Q
D36	4A	IC9D		TP7	10
D37	4A	IC10D		TP8	1R
D38	4A			TP9	1G
D39	4A	IC11	1Q	TP10	1G
D40	1B	IC12	1S	TP11	2H
D41	1B	IC13	1S	TP12	20
D42	1B	IC14	1F	TP13	2N
D43	1B	IC15	1F	TP14	30
		IC16	2H	TP15	5D
(PS-P)		IC17	2K	TP16	40
D44	4A	IC18	2M	TP17	4P
D45	3P	IC19	2N	TP18	1C
D46	3N	IC21	2P	TP19	4E
		IC22	2S	TP20	5D
D47	3N	IC23	2S	TP21	5R
		IC24	3G	TP23	2A
(CD-31 BOARD)		IC25	3H	TP24	2A
D401	9A	IC26	3J	TP30	2E
D402	9C			TP31	2E
D403	9D	(PS/P)			
D404	9D	IC27	3K	(CD-31 BOARD)	
				TP401	10A
IC1	1E	IC28	3L	TP402	10A
IC1C		IC29	3M	TP403	10B
IC1D		IC31	3R	TP404	10B
IC2	1E	IC32	3R		
		IC33	3S	TPE1	1D
(NTSC/PS/PM)		IC34	10	TPE2	1S
IC2B		IC35	20	TPE3	3R
		IC37	1E	TPE4	5A
				TPE5	5R
IC2C		01	1E	TPE6	3A
IC2D		03	1H		
IC3	1F	04	1H		
IC3B		05	1H		
IC3C		06	1H		
IC3D		07	11		
IC3E		08	11		
IC3F		09	11		
IC4	1G	010	1J		
IC4B		011	10		
IC4C		012	10		
IC4D		013	2F		
IC4E		015	21		
IC4G		016	26		
IC4I		017	26		
IC4J		018	21		
IC4K		019	2J		
IC4L		020	2N		
IC4M		021	30		
IC4N		022	30		
IC4O					
IC4P		(PS/P)			
IC4Q		Q23	30		
IC4R					
IC4S		RB1	2A		

1-606-705-13 2500(J); #10001 - 10799
2500(U/C); #10001 - 11399

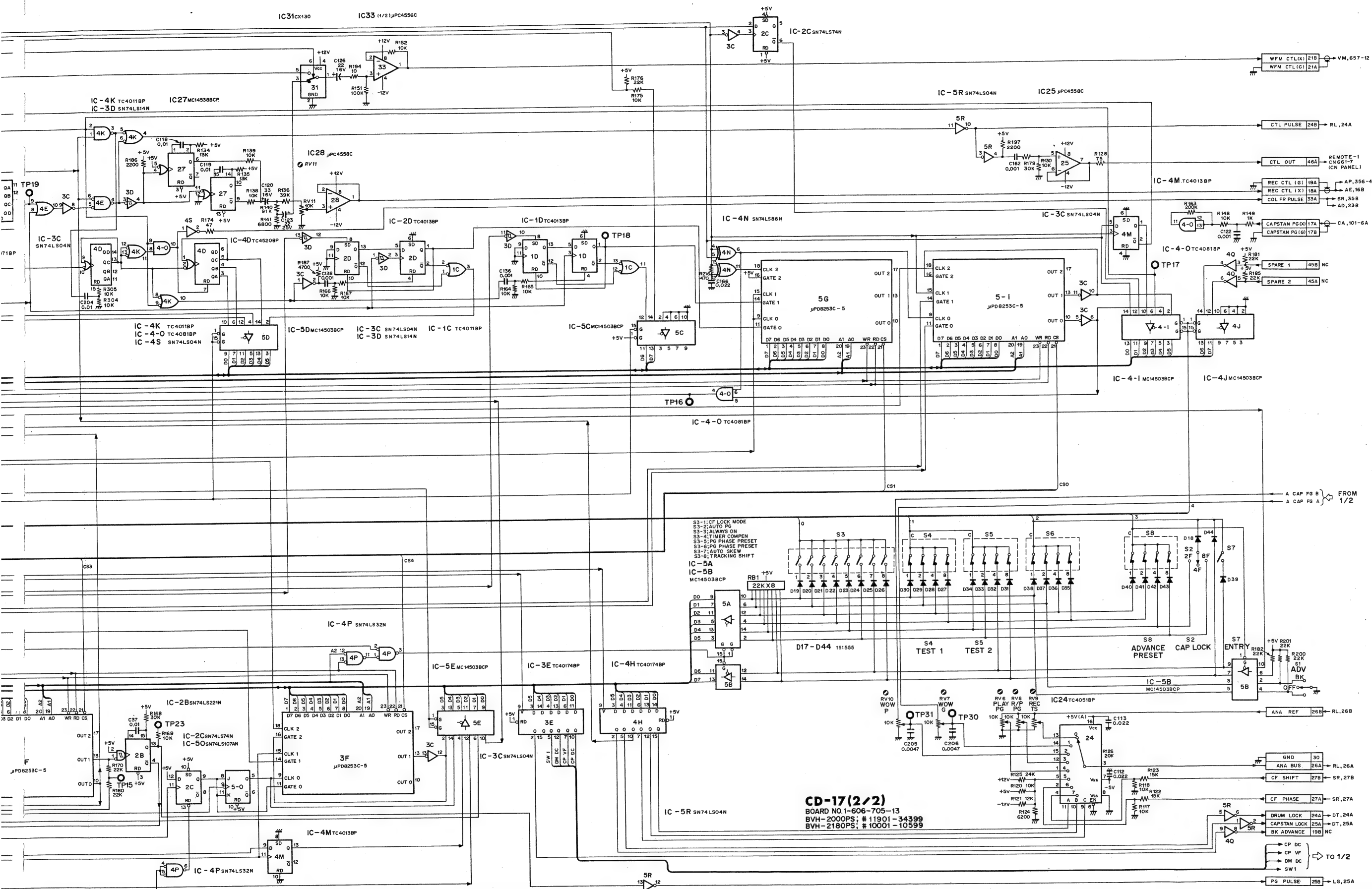
CD-17 BOARD (1/2)

Capstan/Drum Servo

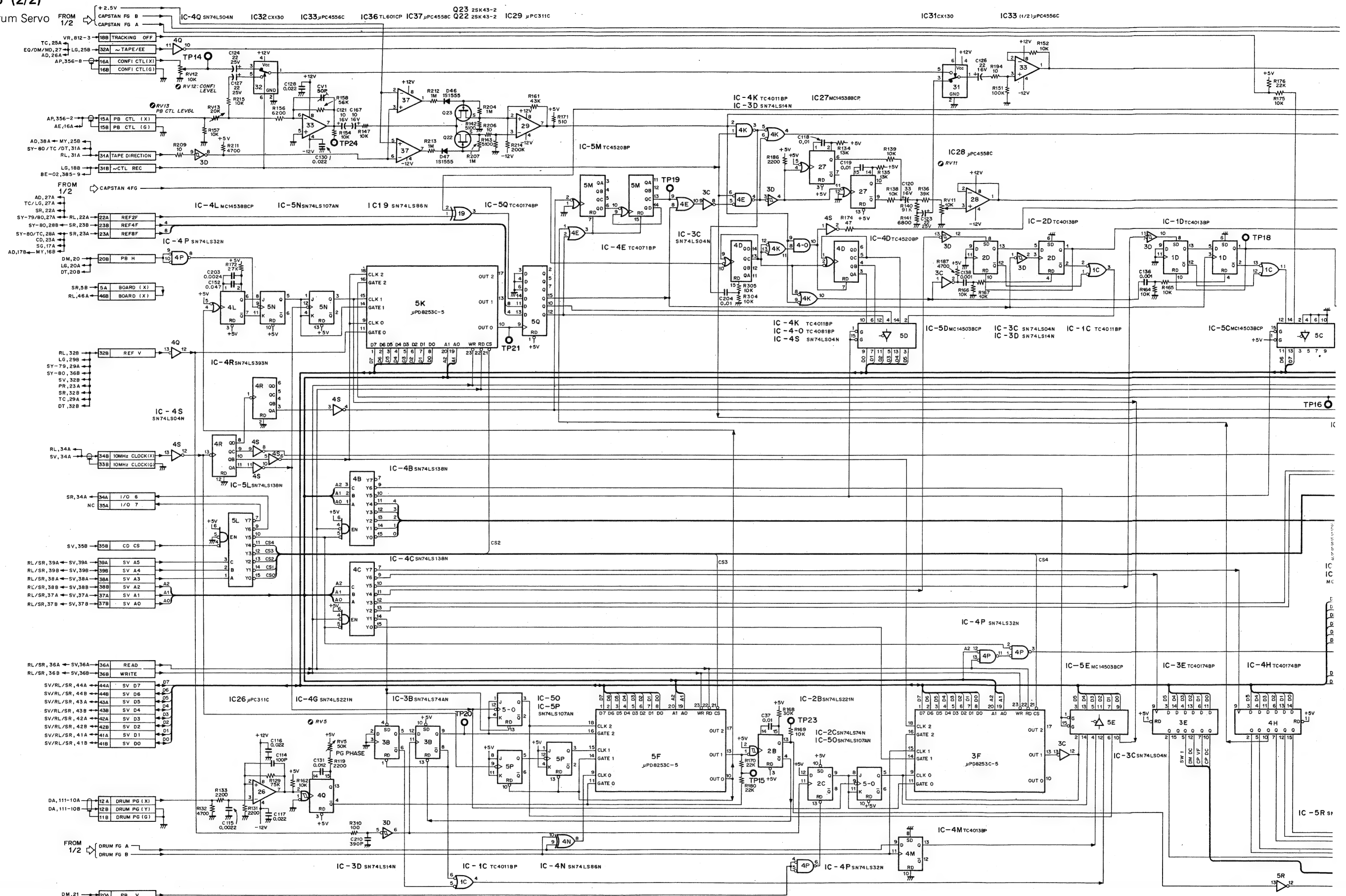


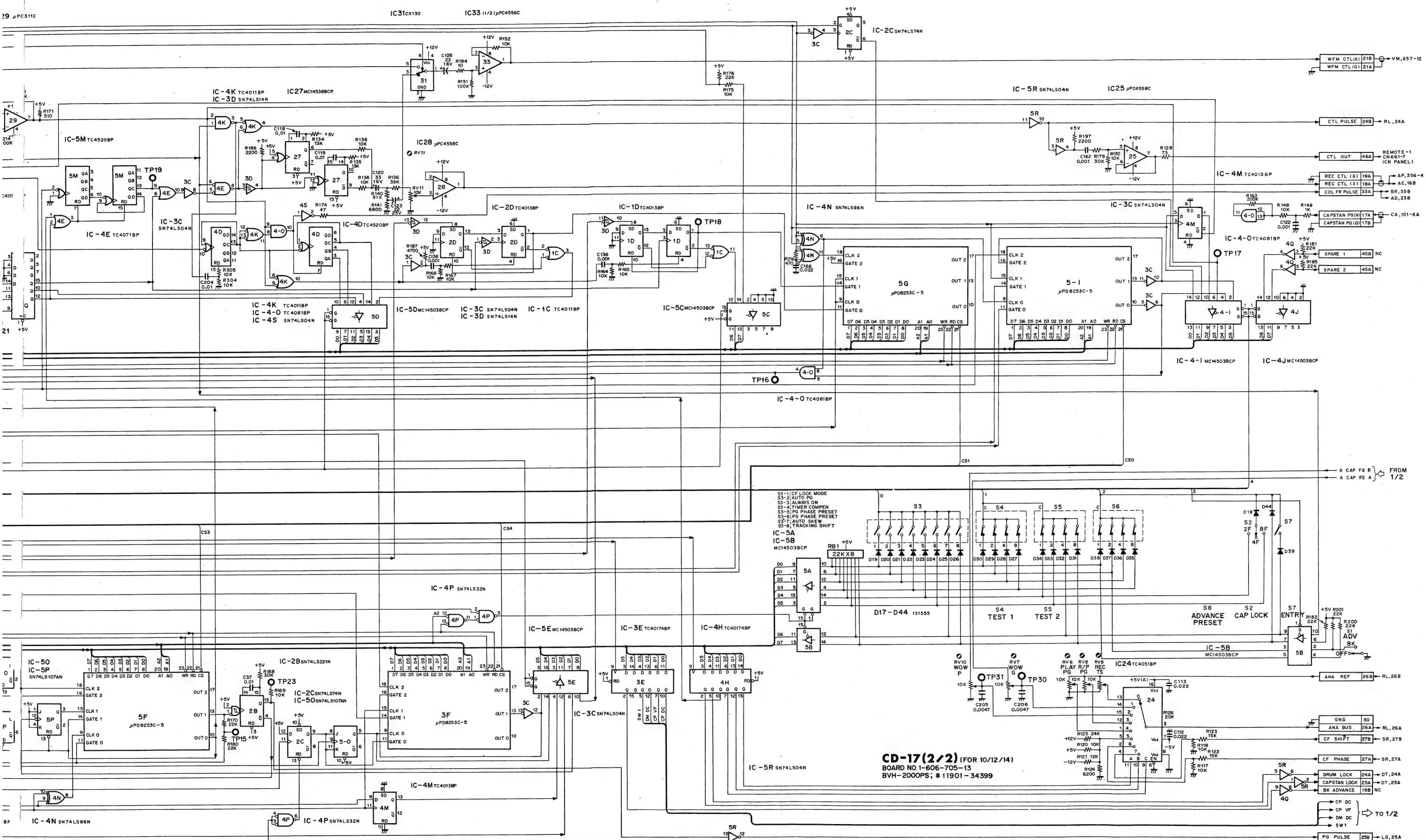
**CD-17 (1/2)**

BOARD NO. 1-606-705-13
BVH-2000PS; #11901-34399
BVH-2180PS; #10001-10599



Capstan/Drum Servo

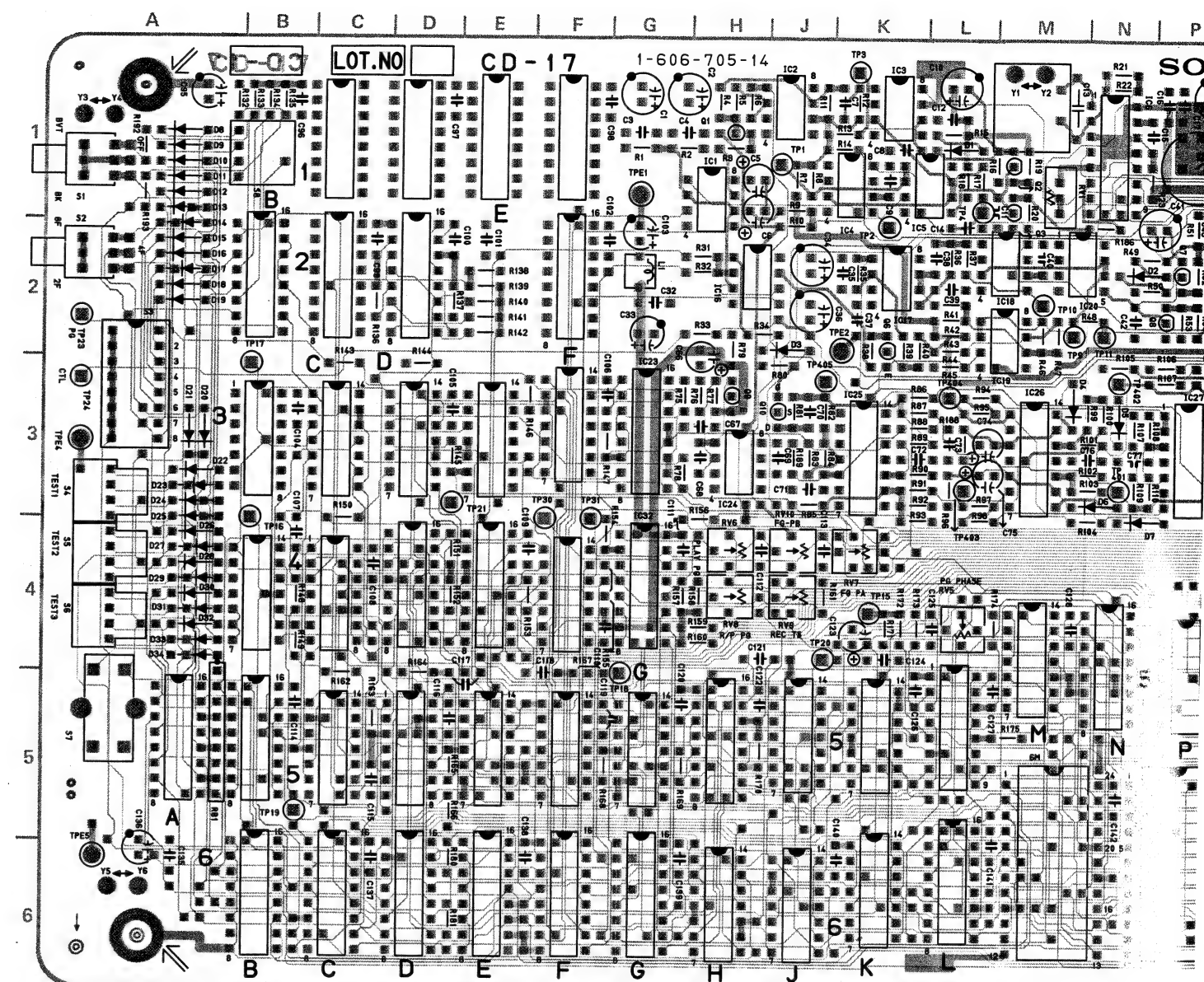
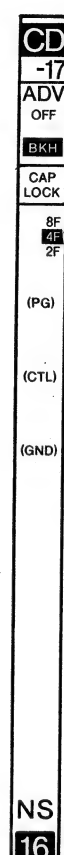
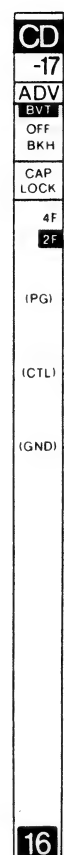
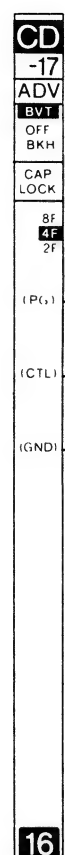
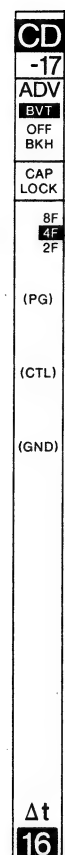




CD-17 BOARD (1-606-705-14) Component Side

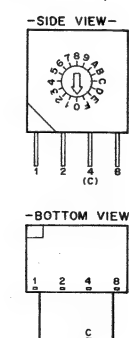
BVH-2500

BVH-2500P

BVH-2000PS/PM
BVH-2180PS/PMBVH-2000
BVH-2180BVH-2000PS
(For 10/12/14 MODEL)BVH-2000
(For 10/12 MODEL)

1-606-705-14 COMPONENT SIDE

S4, 5, 6

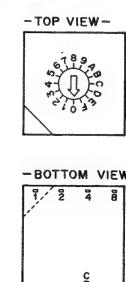


TYPE S-1041

POSITION	PIN NO
1	8
2	4
3	2
4	1
5	0
6	0
7	0
8	0
9	0
A	0
B	0
C	0
D	0
E	0
F	0

O-ON

S8

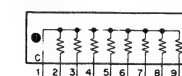


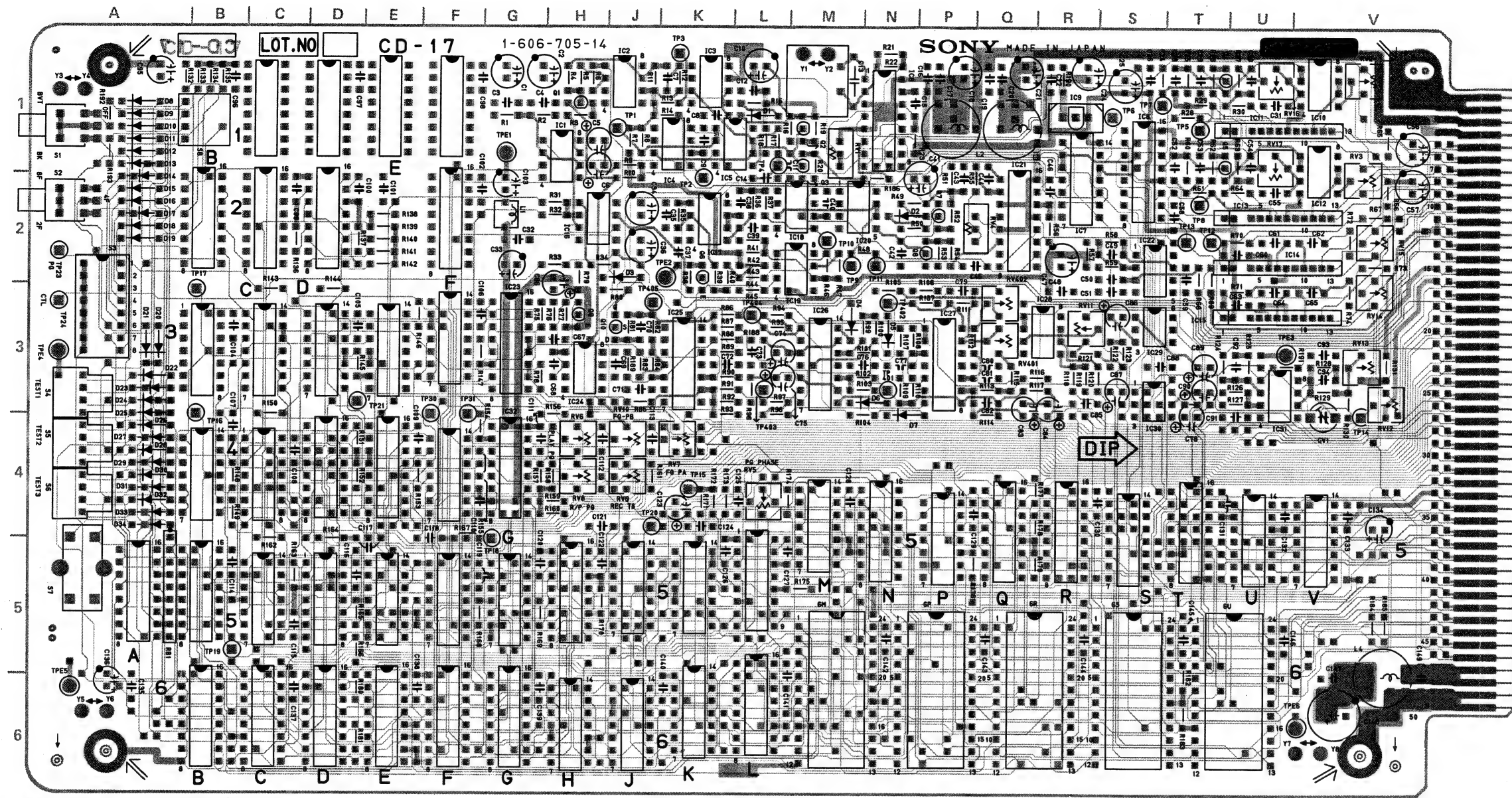
TYPE S-1040

POSITION	PIN NO
1	8
2	4
3	2
4	1
5	0
6	0
7	0
8	0
9	0
A	0
B	0
C	0
D	0
E	0
F	0

O-ON

RB1



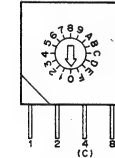


1-606-705-14 COMPONENT SIDE

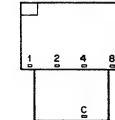
1-606-705-14 SOLDER SIDE

S4, 5, 6

-SIDE VIEW-



-BOTTOM VIEW-



TYPE S-1041

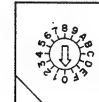


POSITION	PIN NO
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
A	10
B	11
C	12
D	13
E	14
F	15

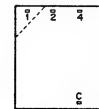
O=ON

S8

-TOP VIEW-



-BOTTOM VIEW-



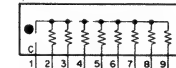
TYPE S-1040



POSITION	PIN NO
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
A	10
B	11
C	12
D	13
E	14
F	15

O=ON

RB1



C-89(9/25)

CD-17 (1-606-705-14 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

(PS/P)	IC5	1L
CV1	3V	
D1	1L	
D2	2N	
D3	2J	

(PS/P)	IC5G	
D4	3M	
D5	3N	
D6	3N	
D7	3N	

D8	1A	
D9	1A	
D10	1A	
D11	1A	
D12	1A	
D13	1A	
D14	1A	
D15	2A	
D16	2A	
D17	2A	
D18	2A	
D19	2A	

(PS/P)	IC5H	
D20	3A	
D21	3A	
D22	3A	
D23	3A	
D24	3A	
D25	3A	
D26	4A	
D27	4A	
D28	4A	
D29	4A	
D30	4A	
D31	4A	
D32	4A	
D33	4A	
D34	4A	

IC1	1H	
IC2	1E	
IC2B		

(PS/P)	IC2C	
IC3	1K	
IC3C		
IC3D		
IC3E		

(PS/P)	IC3F	
IC4	1K	
IC4B		
IC4C		
IC4D		
IC4E		
IC4F		

(PS/P)	IC4G	
IC5	1L	
IC5A		
IC5B		
IC5C		
IC5D		
IC5E		
IC5F		
IC5G		
IC5H		
IC5J		
IC5K		
IC5L		
IC5M		
IC5N		
IC5P		
IC5Q		
IC5R		
IC5S		
IC5T		
IC5U		
IC5V		
IC6	1N	
IC6B		
IC6C		
IC6D		
IC6E		
IC6F		
IC6G		
IC6H		
IC6J		
IC6K		
IC6L		
IC6M		
IC6P		
IC6R		
IC6S		
IC6T		
IC6U		
IC7	2R	
IC8	1S	
IC9	1R	
IC10	1V	
IC11	1U	
IC12	2V	
IC13	2U	
IC14	2V	
IC15	3U	
IC16	2H	
IC17	2K	
IC18	2M	
IC19	2N	
IC20	2L	
IC21	2O	
IC22	2S	

(PS/P)	IC23	3G
IC24	3H	
IC25	3K	

(PS/P)	IC26	3M
IC27	3P	
IC28	3R	
IC29	3S	
IC30	3S	
IC31	3S	
IC32	3G	

(PS/P)	IC33	3J
IC34	3L	
IC35	3L	
IC36	3L	
IC37	3L	
IC38	3L	
IC39	3L	
IC40	3L	
IC41	3L	
IC42	3L	
IC43	3L	
IC44	3L	
IC45	3L	
IC46	3L	
IC47	3L	
IC48	3L	
IC49	3L	
IC50	3L	
IC51	3L	
IC52	3L	
IC53	3L	
IC54	3L	
IC55	3L	
IC56	3L	
IC57	3L	
IC58	3L	
IC59	3L	
IC60	3L	
IC61	3L	
IC62	3L	
IC63	3L	
IC64	3L	
IC65	3L	
IC66	3L	
IC67	3L	
IC68	3L	
IC69	3L	
IC70	3L	
IC71	3L	
IC72	3L	
IC73	3L	
IC74	3L	
IC75	3L	
IC76	3L	
IC77	3L	
IC78	3L	
IC79	3L	
IC80	3L	
IC81	3L	
IC82	3L	
IC83	3L	
IC84	3L	
IC85	3L	
IC86	3L	
IC87	3L	
IC88	3L	
IC89	3L	
IC90	3L	
IC91	3L	
IC92	3L	
IC93	3L	
IC94	3L	
IC95	3L	
IC96	3L	
IC97	3L	
IC98	3L	
IC99	3L	
IC100	3L	

Q1	1A	
Q2	1M	
Q3	2M	
Q4	1T	
Q5	1T	
Q6	2K	
Q7	2P	
Q8	2N	
Q9	3H	
Q10	3J	

RB1	5A	
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RV1	1M	
RV2	1V	
RV3	1V	
RV4	3P	
RV5	4L	
RV6	4H	
RV7	4K	
RV8	4H	
RV9	4J	
RV10	4J	
RV11	3R	
RV12	2V	
RV13	2V	
RV14	2V	
RV15	2V	
RV16	1U	
RV17	1U	

(PS/P)	RV401	3R
RV402	2Q	
S1	1A	
S2	2A	
S3	2A	
S4	3A	
S5	4A	
S6	4A	
S7	5A	
S8	1B	

TP1	1J	
TP2	1K	
TP3	1K	
TP4	1L	
TP5	1T	
TP6	1S	
TP7	1S	
TP8	1S	
TP9	2M	
TP10	2M	
TP11	2N	
TP12	2T	
TP13	2T	
TP14	3V	
TP15	4K	
TP16	4B	
TP17	2B	
TP18	5G	
TP19	5B	
TP20	4J	
TP21	3E	
TP22	2A	
TP23	2A	
TP24	3A	
TP30	3F	
TP31	3F	
TP401	3F	

(PS/P)	TP402	3W
TP403	3L	
TP404	3L	
TP405	3J	

TPE1	1G	
TPE2	2J	
TPE3	3U	
TPE4	3A	
TPE5	6A	
TPE6	6V	

Q1	1A	
Q2	1M	
Q3	2M	
Q4	1T	
Q5	1T	
Q6	2K	
Q7	2P	
Q8	2N	
Q9	3H	
Q10	3J	

RB1	5A	
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C-89(10/25)

C-89(9/1)

C-89(8/25)

C-89(8/25)

C-89(8/25)

C-89(8/25)

C-89(8/25)

C-89(8/25)

C-89(8/25)

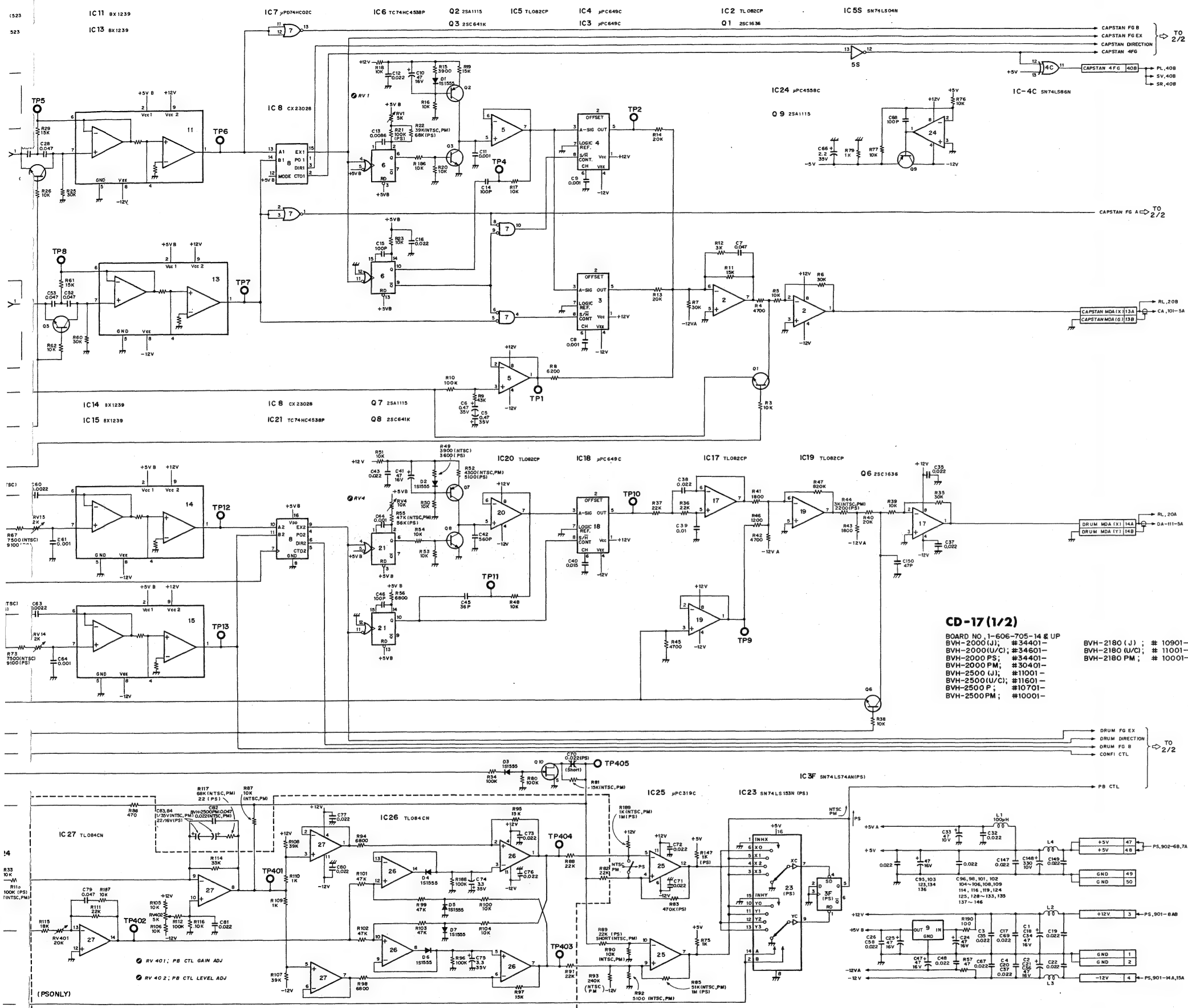
C-89(8/25)

C-89(8/25)

C-89(8/25)

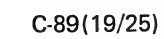
C-89(8/25)

C-89(8/25)



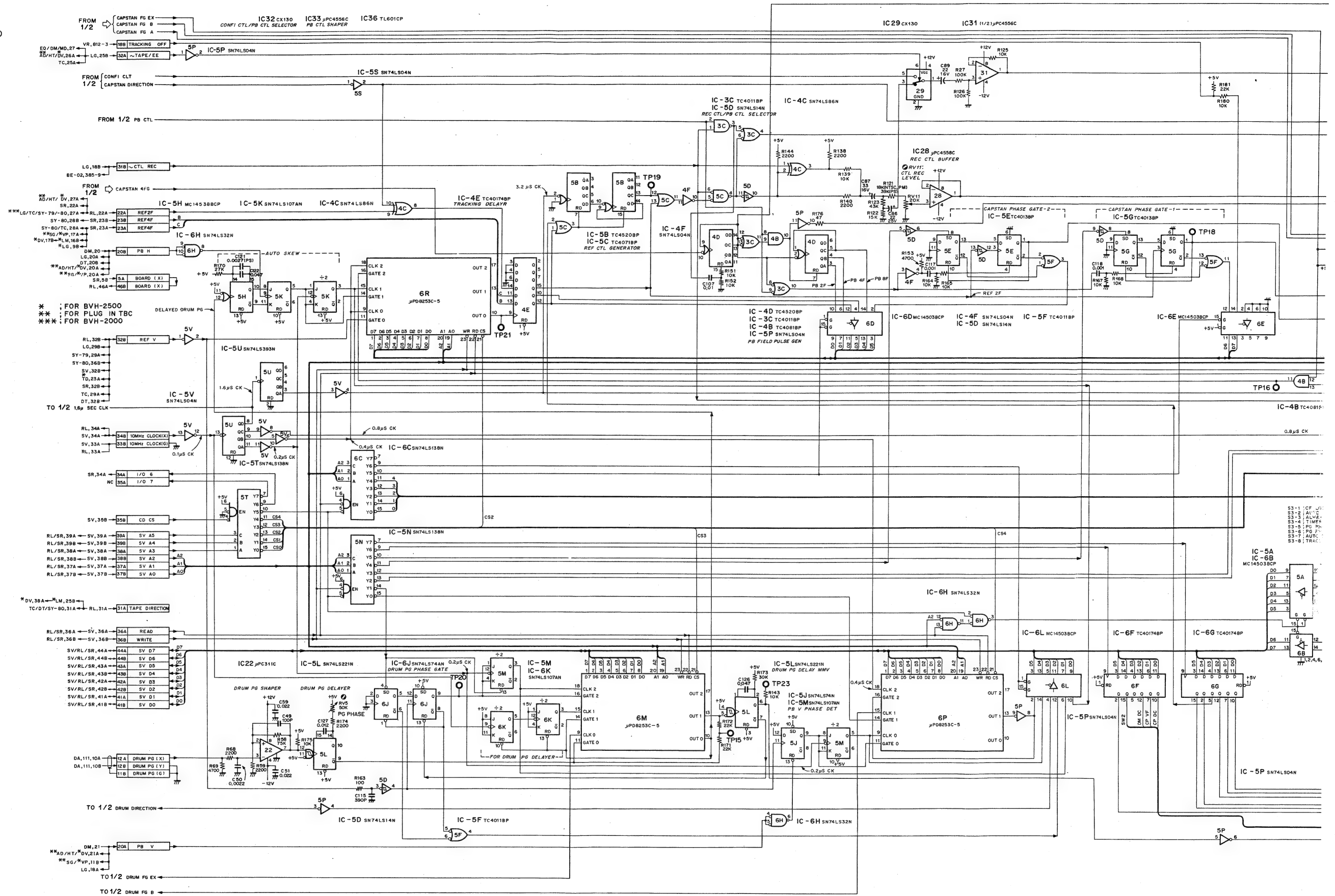
C-89(18/25)

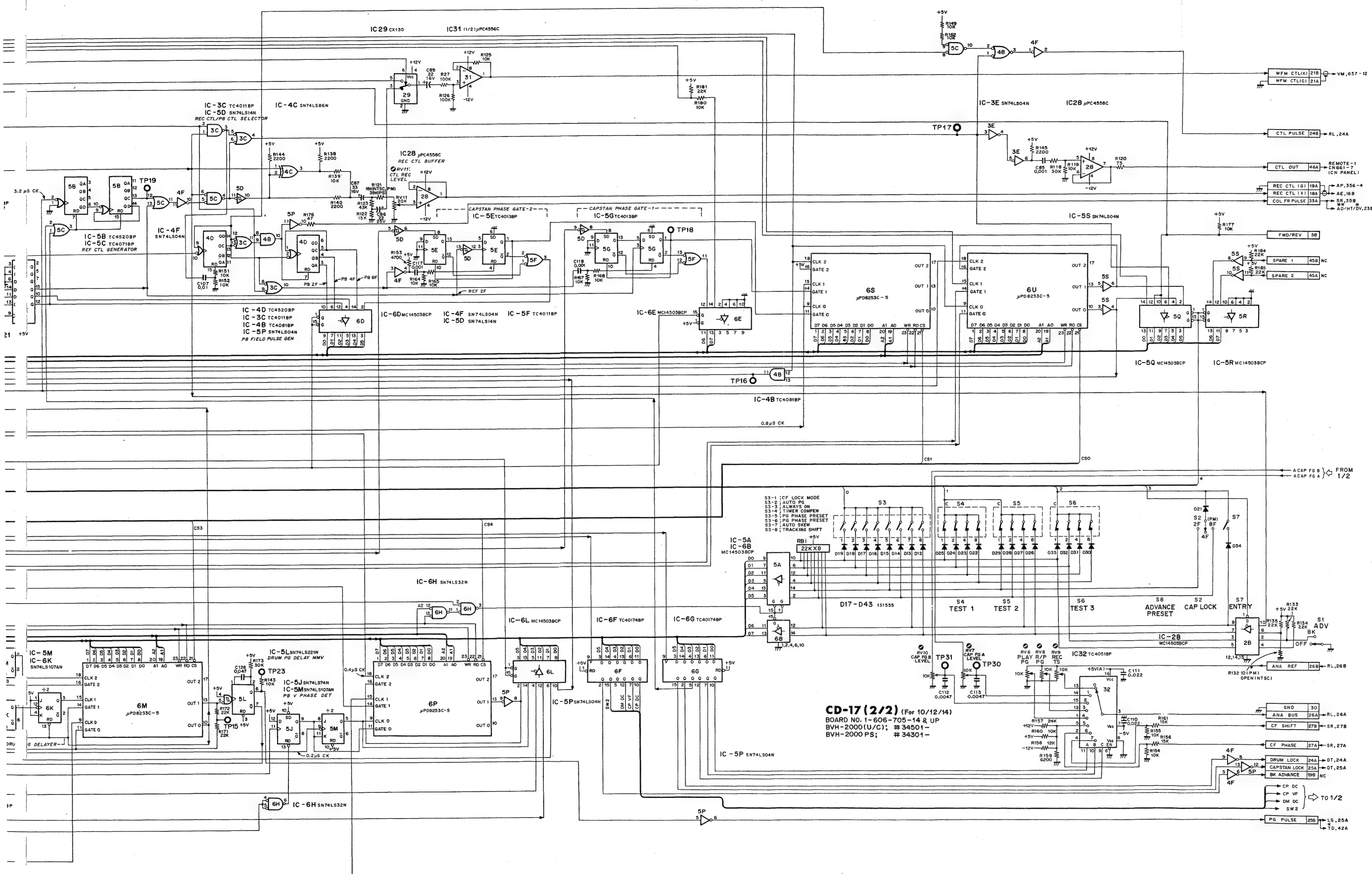
CD-1
BOARD 1
BVH-20
BVH-20
BVH-20
BVH-20
BVH-25
BVH-25
BVH-25
BVH-25



CD-17 BOARD (2/2)

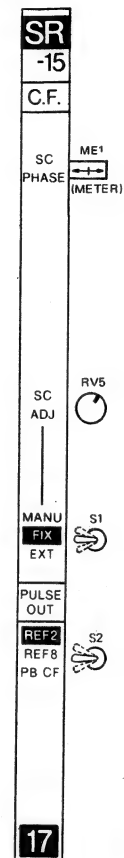
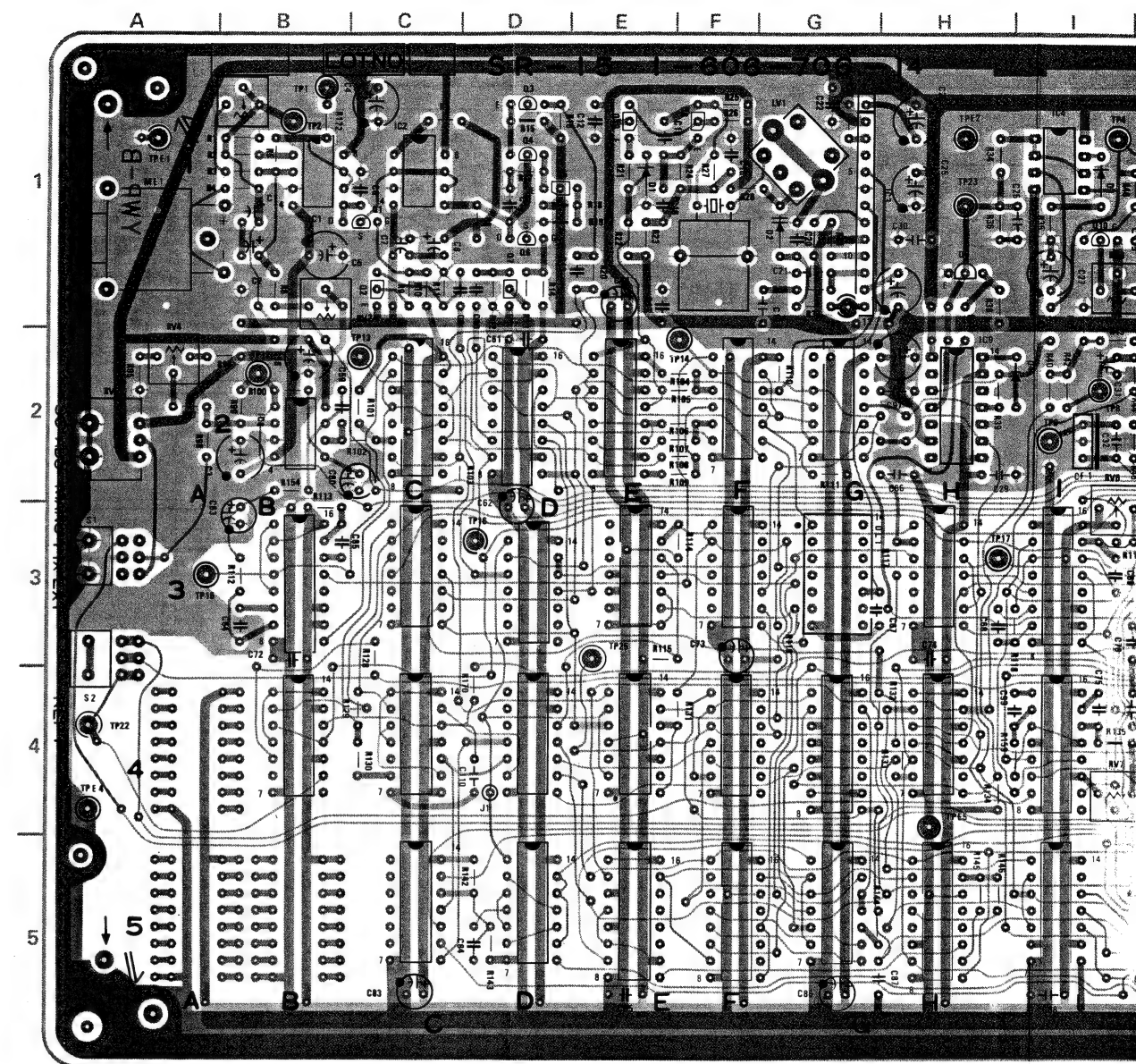
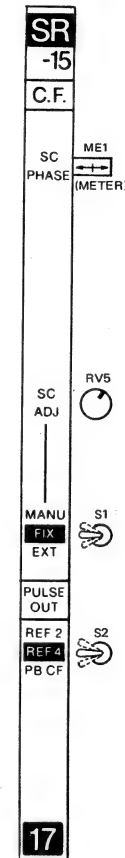
Capstan/Drum Servo





SR-15 BOARD (1-606-706-14)

Component Side

BVH-2000PS/PM
BVH-2180PS/PM
BVH-2500PBVH-2000
BVH-2180
BVH-2500

1-606-706-14 COMPONENT SIDE

100 /PM
180 /PM
500P

BVH-2000
BVH-2180
BVH-2500

SR
-15

C.F.

SC PHASE

ME1

(METER)

SC ADJ

RV5

MANU

FIX

EXT

S1

PULSE

OUT

S2

REF 2

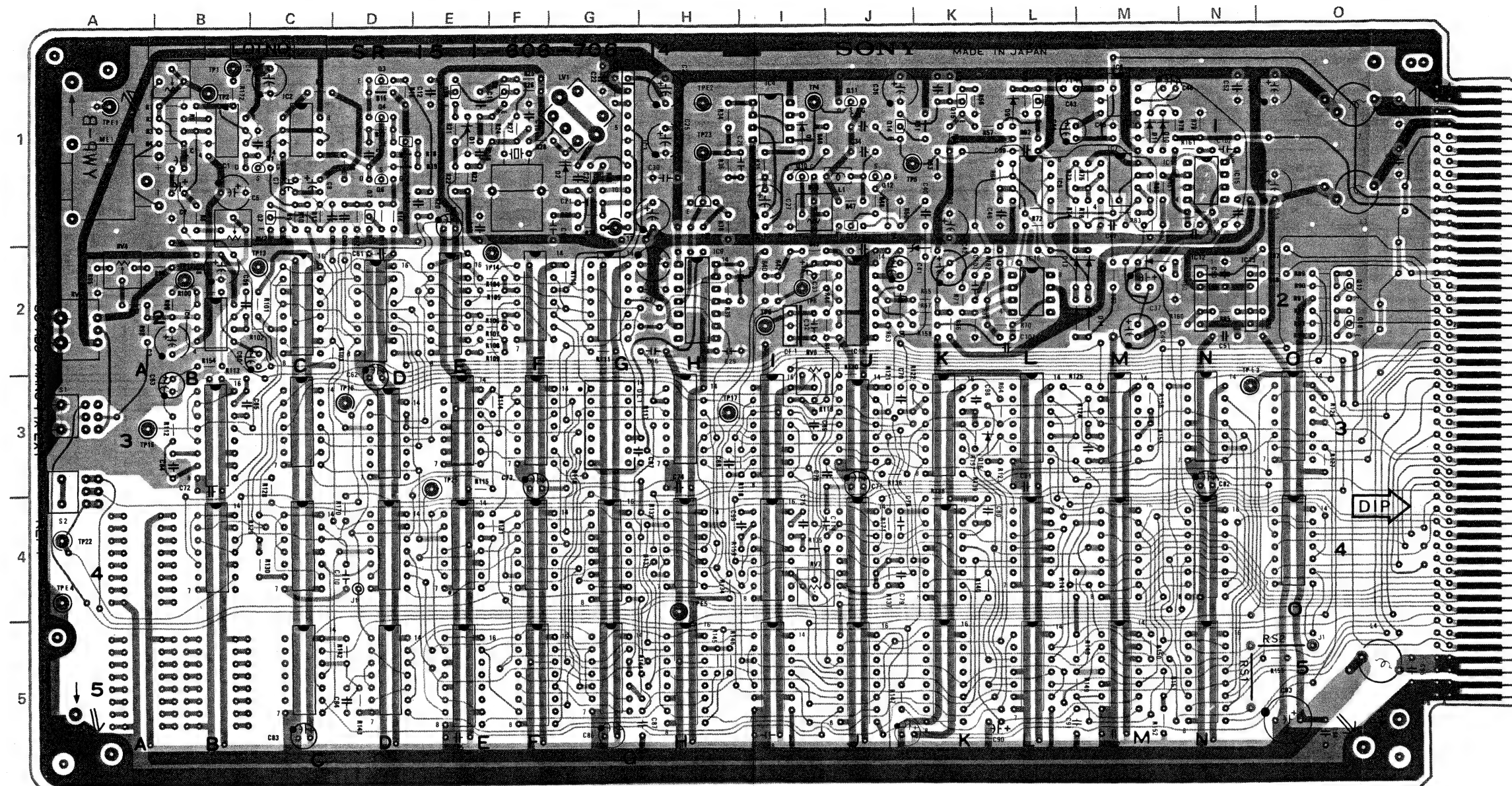
REF 4

PB CF

S2

17

17



1-606-706-14 COMPONENT SIDE

1-606-706-14 SOLDER SIDE

SR-15 (1-606-706-13 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

D1 1E
D2 1G
D3 1I
D4 2H
D5 2J
D6 2J
D7 2J
D8 2M
D9 1L
D10 1M
D11 1M
D12 2M
D13 2L
D14 2M
D15 2L
D16 3K

DL1 3G
IC1 1B
IC2 1C
IC3 1G
IC4 1I
IC5 1J
IC6 1K
IC7 1L
IC8 1M
IC9 1N
IC10 1O
IC11 1P
IC12 1Q
IC13 1R
IC14 1S
IC15 1T
IC16 1U

IC17 1V
IC18 1W
IC19 1X
IC20 1Y
IC21 1Z
IC22 1A
IC23 1B
IC24 1C
IC25 1D
IC26 1E
IC27 1F
IC28 1G
IC29 1H
IC30 1I

IC31 1J
IC32 1K
IC33 1L
IC34 1M
IC35 1N
IC36 1O
IC37 1P
IC38 1Q
IC39 1R
IC40 1S

IC41 1T
IC42 1U
IC43 1V
IC44 1W
IC45 1X
IC46 1Y
IC47 1Z
IC48 1A
IC49 1B
IC50 1C

IC51 1D
IC52 1E
IC53 1F
IC54 1G
IC55 1H
IC56 1I
IC57 1J
IC58 1K
IC59 1L
IC60 1M

IC61 1N
IC62 1O
IC63 1P
IC64 1Q
IC65 1R
IC66 1S
IC67 1T
IC68 1U
IC69 1V
IC70 1W

IC71 1X
IC72 1Y
IC73 1Z
IC74 1A
IC75 1B
IC76 1C
IC77 1D
IC78 1E
IC79 1F
IC80 1G

IC81 1H
IC82 1I
IC83 1J
IC84 1K
IC85 1L
IC86 1M
IC87 1N
IC88 1O
IC89 1P
IC90 1Q

IC91 1R
IC92 1S
IC93 1T
IC94 1U
IC95 1V
IC96 1W
IC97 1X
IC98 1Y
IC99 1Z
IC100 1A

IC101 1B
IC102 1C
IC103 1D
IC104 1E
IC105 1F
IC106 1G
IC107 1H
IC108 1I
IC109 1J
IC110 1K

IC111 1L
IC112 1M
IC113 1N
IC114 1O
IC115 1P
IC116 1Q
IC117 1R
IC118 1S
IC119 1T
IC120 1U

IC121 1V
IC122 1W
IC123 1X
IC124 1Y
IC125 1Z
IC126 1A
IC127 1B
IC128 1C
IC129 1D
IC130 1E

IC131 1F
IC132 1G
IC133 1H
IC134 1I
IC135 1J
IC136 1K
IC137 1L
IC138 1M
IC139 1N
IC140 1O

IC141 1P
IC142 1Q
IC143 1R
IC144 1S
IC145 1T
IC146 1U
IC147 1V
IC148 1W
IC149 1X
IC150 1Y

IC151 1Z
IC152 1A
IC153 1B
IC154 1C
IC155 1D
IC156 1E
IC157 1F
IC158 1G
IC159 1H
IC160 1I

IC161 1J
IC162 1K
IC163 1L
IC164 1M
IC165 1N
IC166 1O
IC167 1P
IC168 1Q
IC169 1R
IC170 1S

IC171 1T
IC172 1U
IC173 1V
IC174 1W
IC175 1X
IC176 1Y
IC177 1Z
IC178 1A
IC179 1B
IC180 1C

IC181 1D
IC182 1E
IC183 1F
IC184 1G
IC185 1H
IC186 1I
IC187 1J
IC188 1K
IC189 1L
IC190 1M

IC191 1N
IC192 1O
IC193 1P
IC194 1Q
IC195 1R
IC196 1S
IC197 1T
IC198 1U
IC199 1V
IC200 1W

IC201 1X
IC202 1Y
IC203 1Z
IC204 1A
IC205 1B
IC206 1C
IC207 1D
IC208 1E
IC209 1F
IC210 1G

IC211 1H
IC212 1I
IC213 1J
IC214 1K
IC215 1L
IC216 1M
IC217 1N
IC218 1O
IC219 1P
IC220 1Q

IC221 1R
IC222 1S
IC223 1T
IC224 1U
IC225 1V
IC226 1W
IC227 1X
IC228 1Y
IC229 1Z
IC230 1A

IC231 1B
IC232 1C
IC233 1D
IC234 1E
IC235 1F
IC236 1G
IC237 1H
IC238 1I
IC239 1J
IC240 1K

IC241 1L
IC242 1M
IC243 1N
IC244 1O
IC245 1P
IC246 1Q
IC247 1R
IC248 1S
IC249 1T
IC250 1U

IC251 1V
IC252 1W
IC253 1X
IC254 1Y
IC255 1Z
IC256 1A
IC257 1B
IC258 1C
IC259 1D
IC260 1E

IC261 1F
IC262 1G
IC263 1H
IC264 1I
IC265 1J
IC266 1K
IC267 1L
IC268 1M
IC269 1N
IC270 1O

IC271 1P
IC272 1Q
IC273 1R
IC274 1S
IC275 1T
IC276 1U
IC277 1V
IC278 1W
IC279 1X
IC280 1Y

IC281 1Z
IC282 1A
IC283 1B
IC284 1C
IC285 1D
IC286 1E
IC287 1F
IC288 1G
IC289 1H
IC290 1I

IC291 1J
IC292 1K
IC293 1L
IC294 1M
IC295 1N
IC296 1O
IC297 1P
IC298 1Q
IC299 1R
IC300 1S

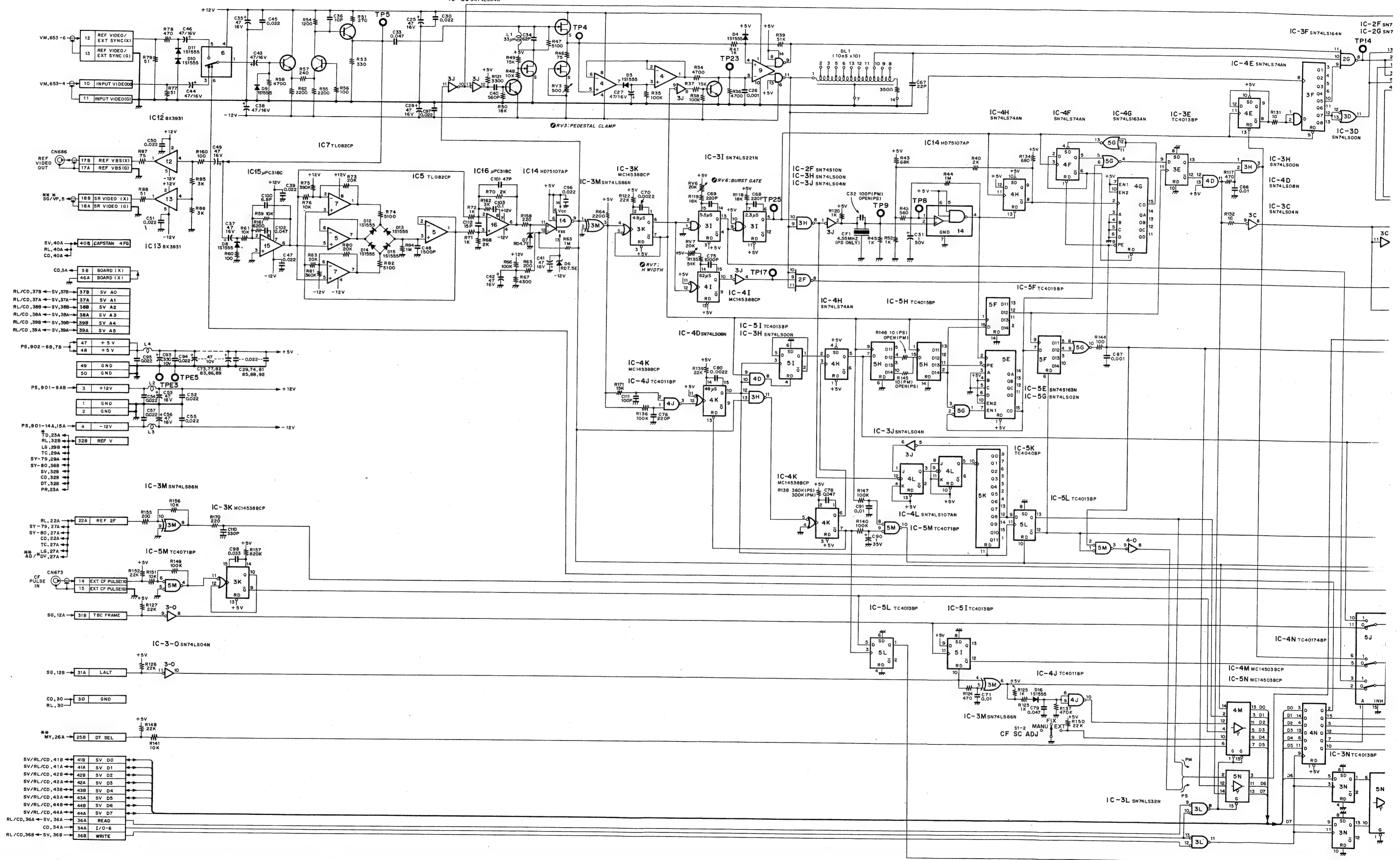
Servo Ref. Signal Generator

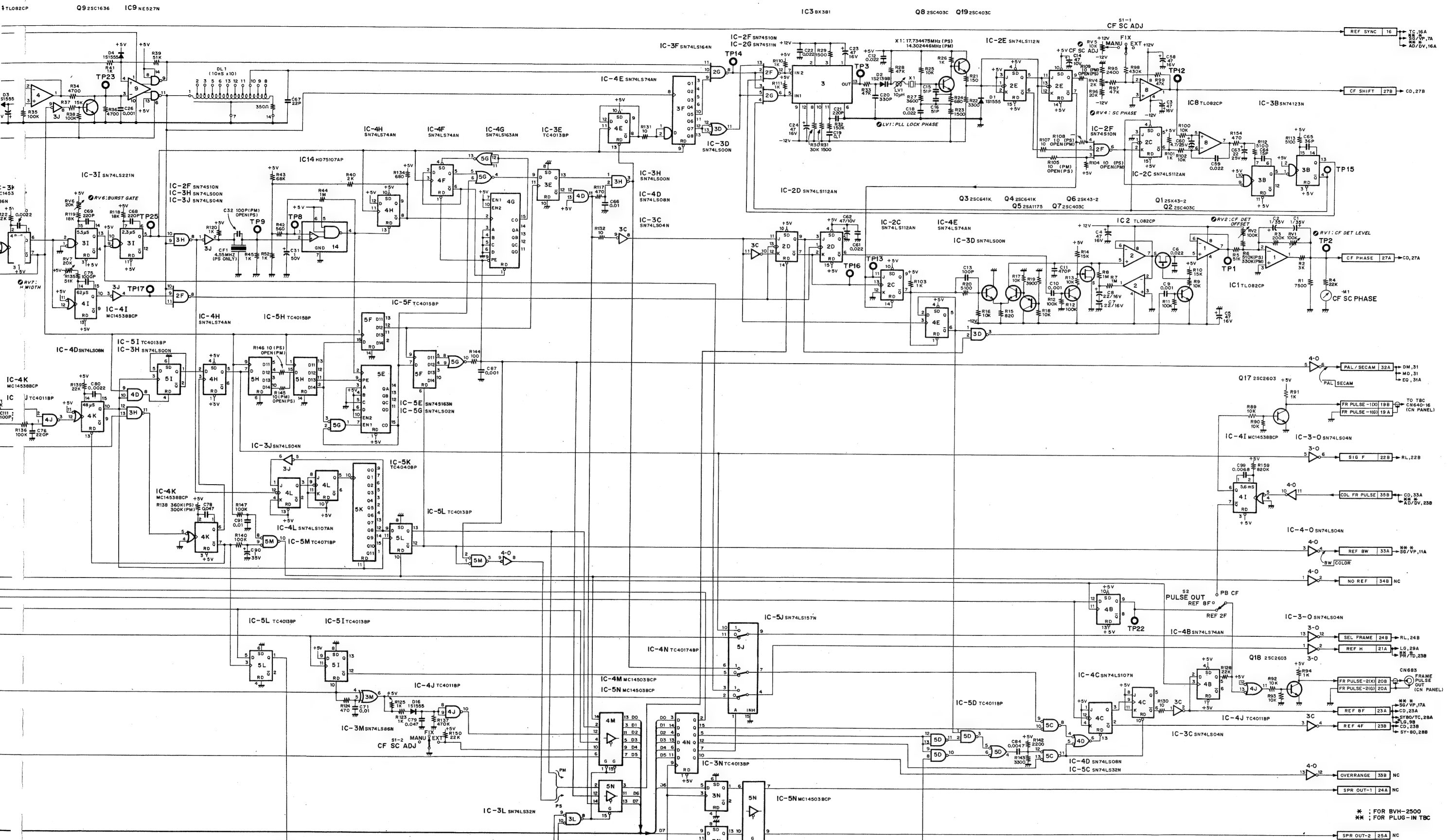
Q11 2SK43-2

Q132SC403C Q12

-2 Q10 2SK43-5 IC4 TL082CP

Q9 2SC1636 IC9 NE527N

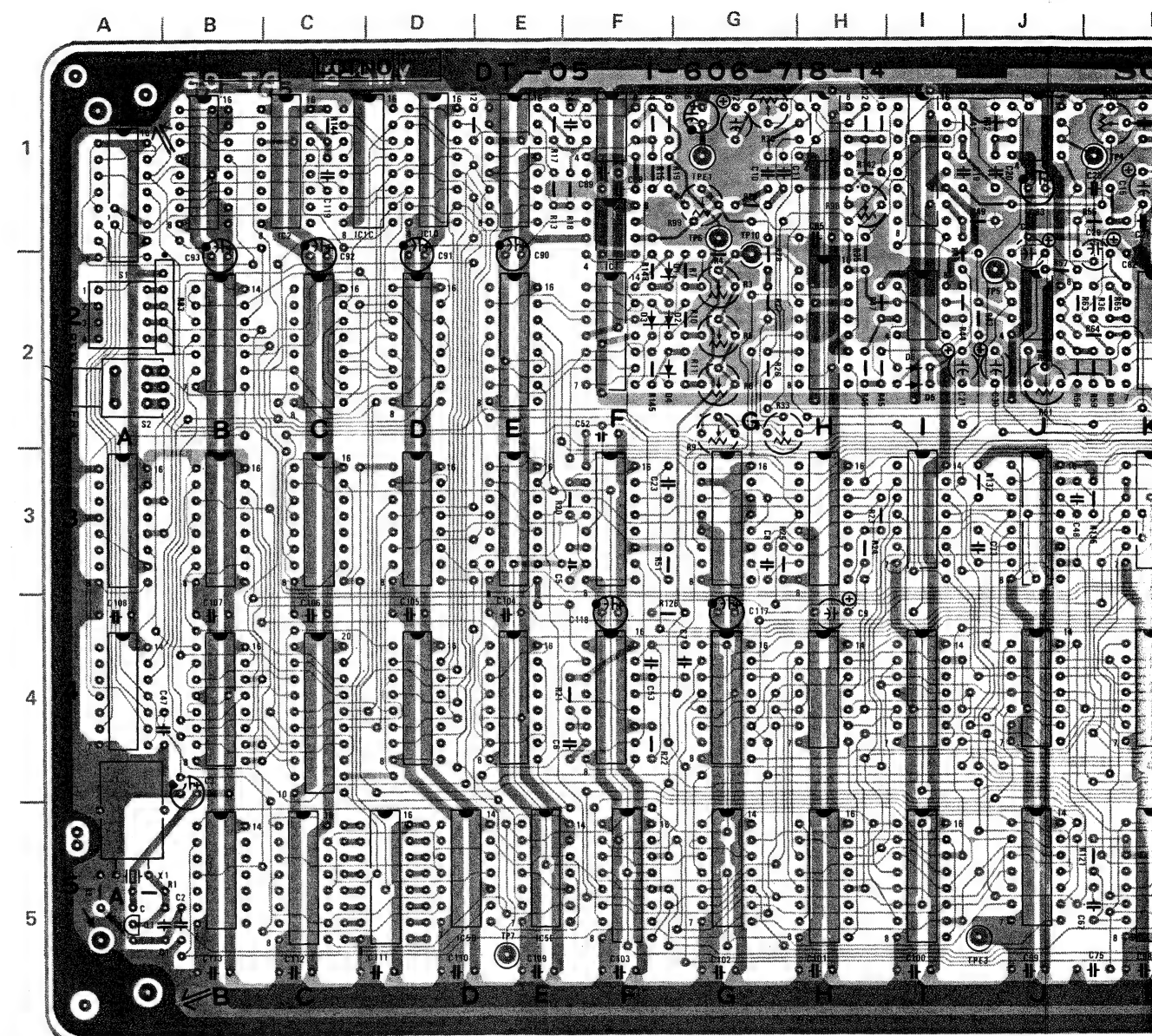
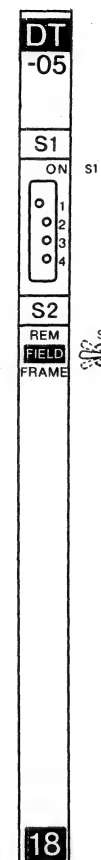




SR-15 BOARD
BOARD NO. 1-606-706-12 & UP
BVH-2000PS; #10301- BVH-2180PS; #10001-
BVH-2000PM; #10001- BVH-2180PM; #10001-
BVH-2500P; #10001-
BVH-2500PM; #10001-

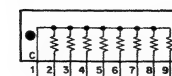
DT-05 BOARD (1-606-718-14)

Component Side

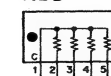


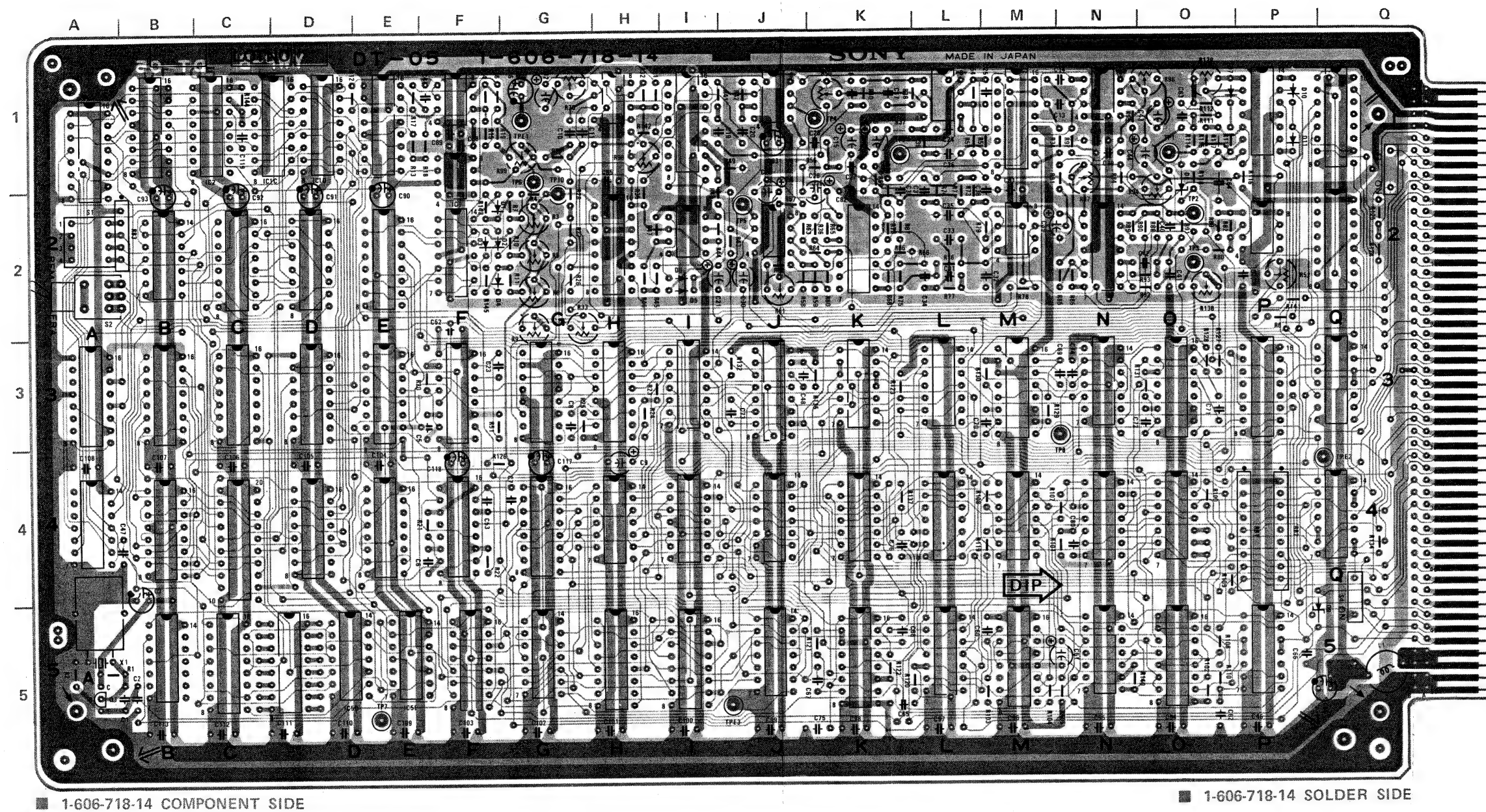
1-606-718-14 COMPONENT SIDE

RB1, 2



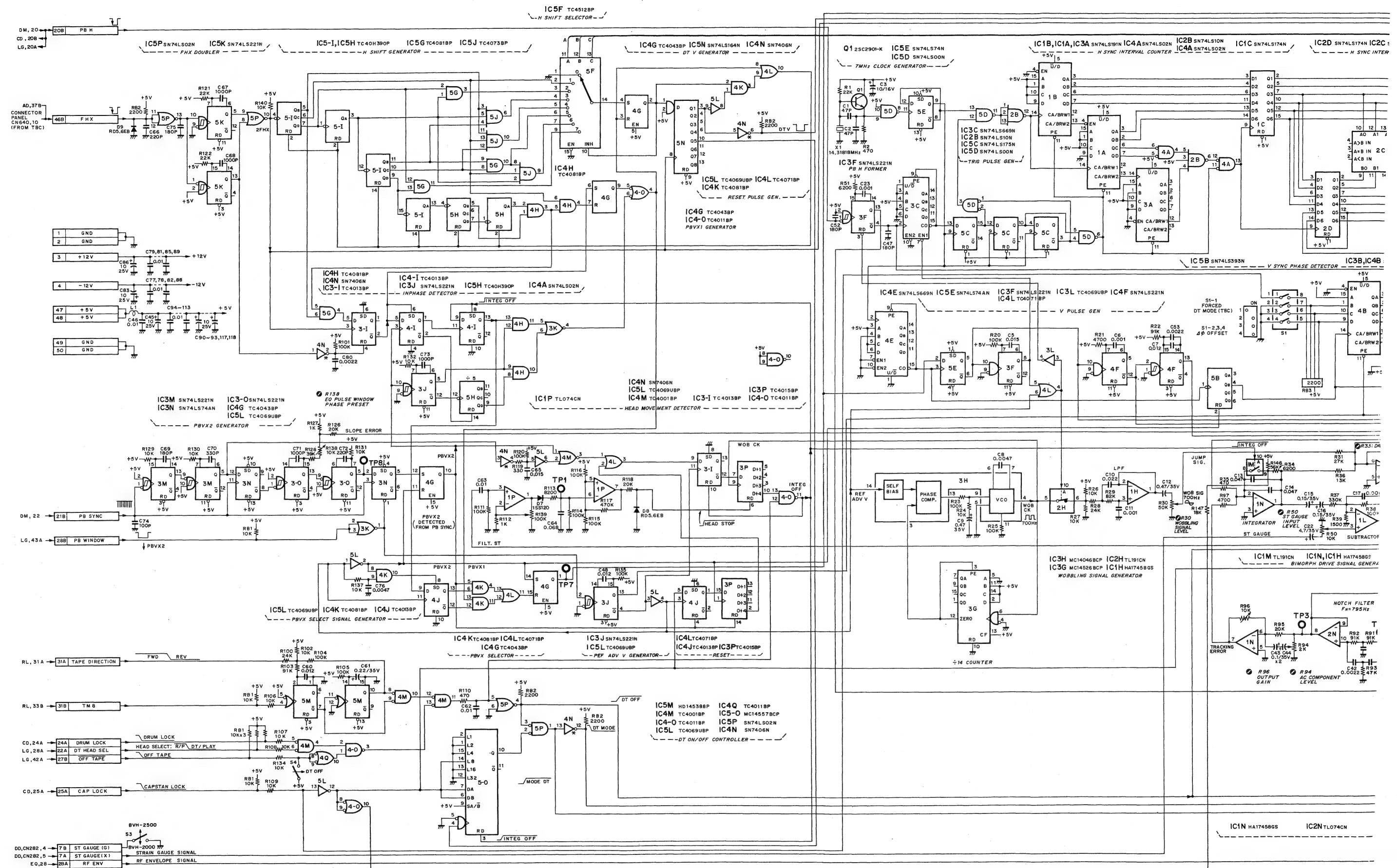
RB3



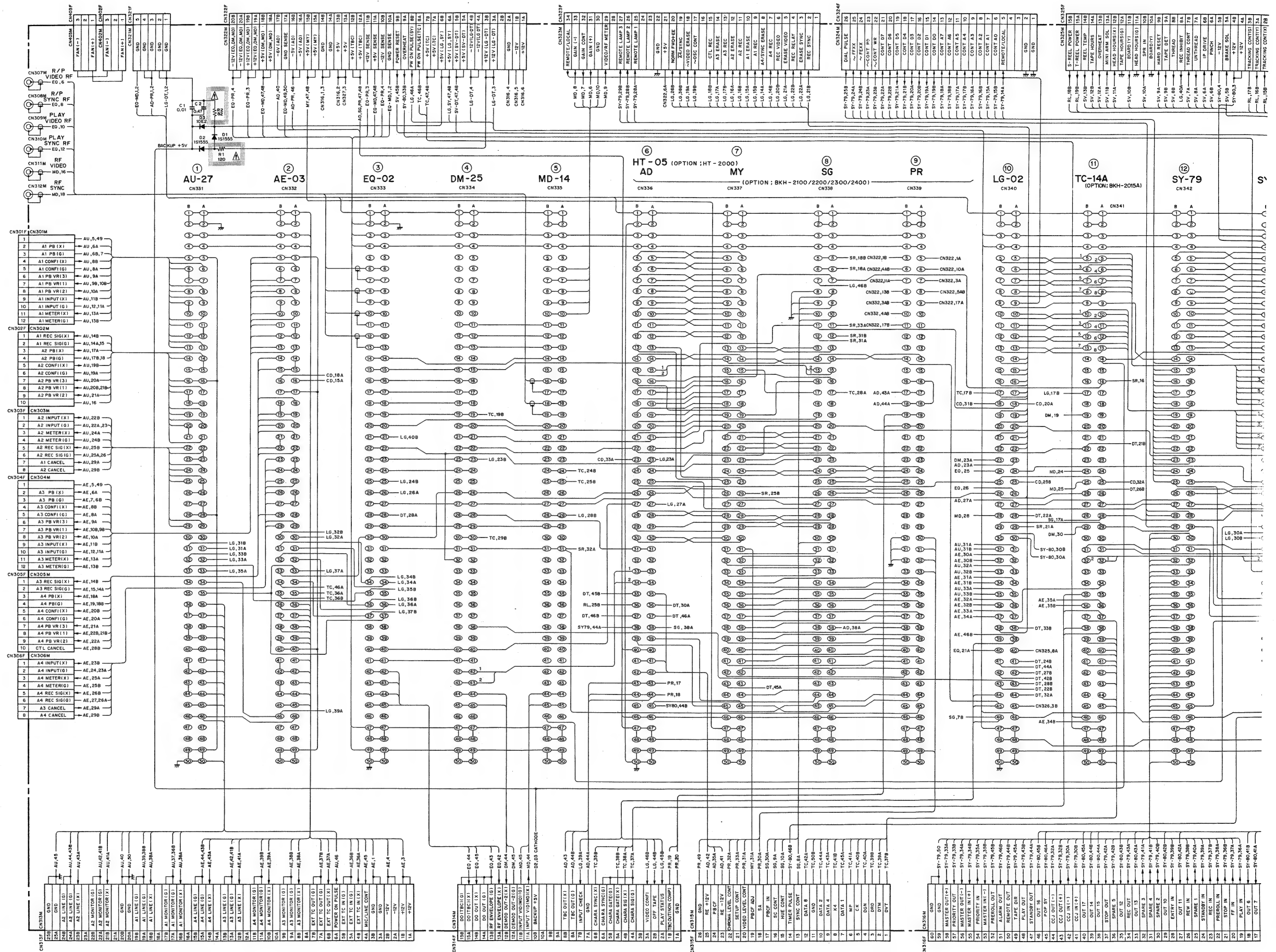


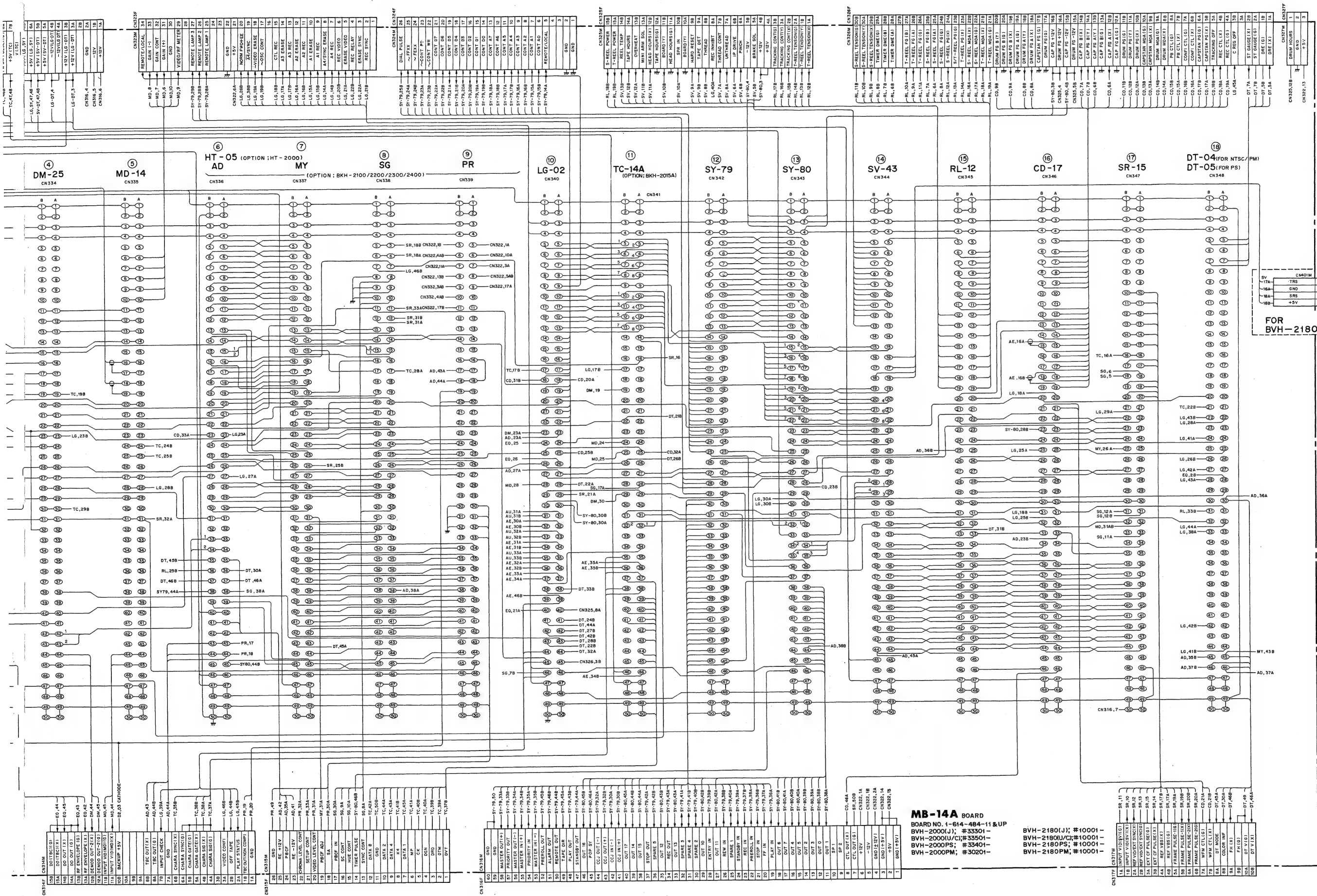
DT-05 BOARD; FOR 02/12/04/14 MODEL

DT Control

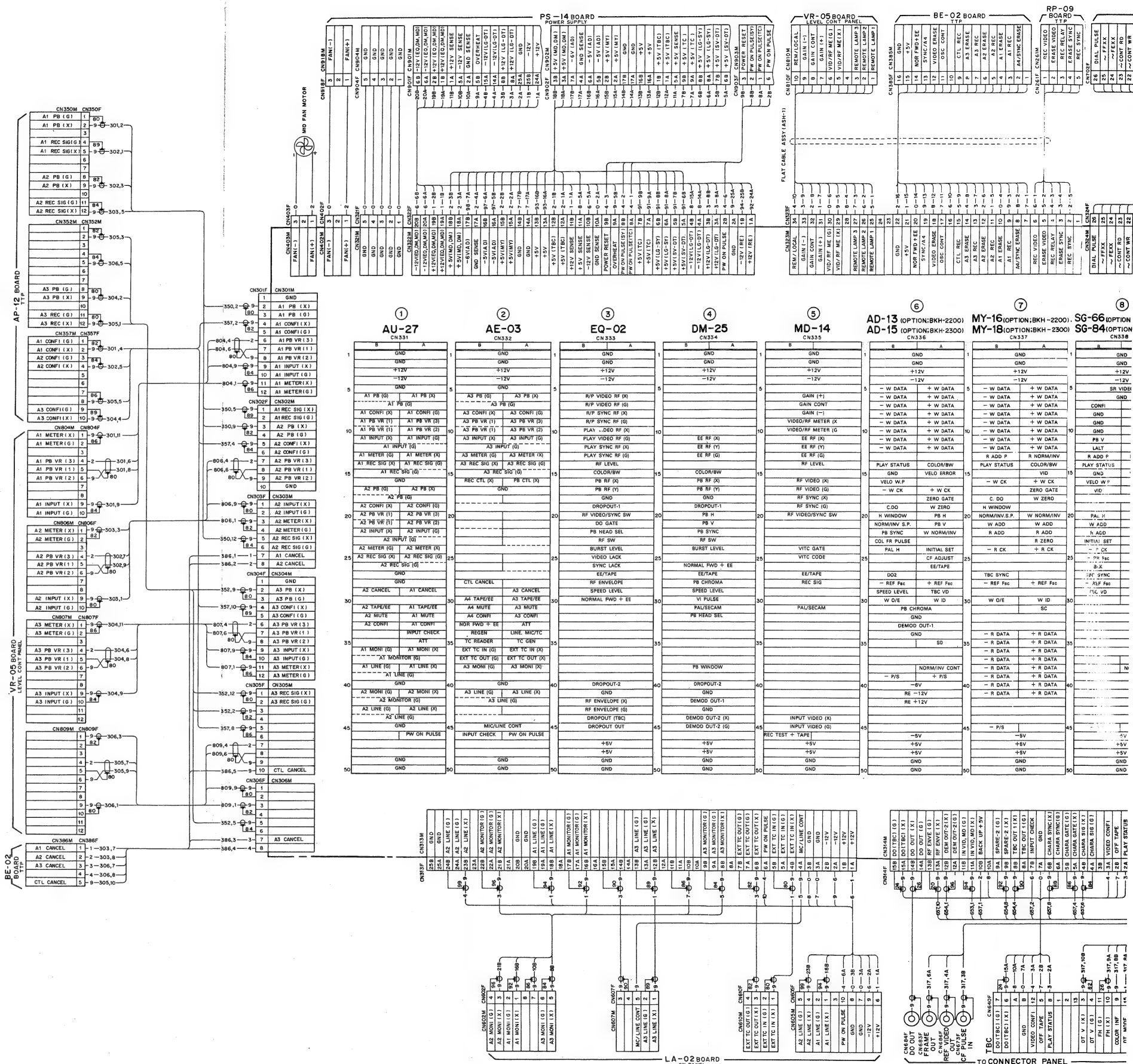
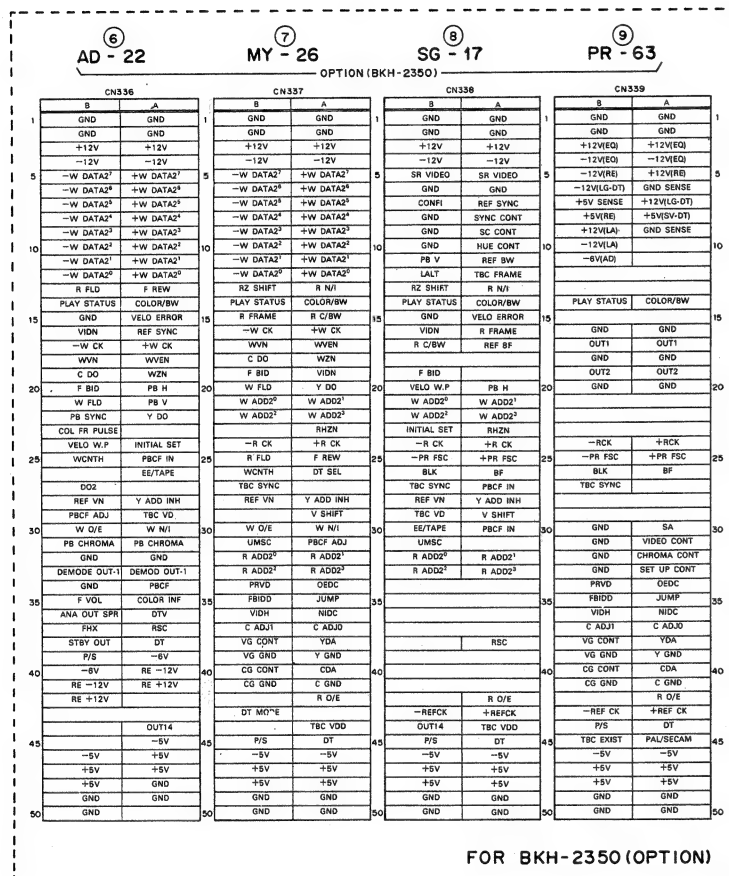


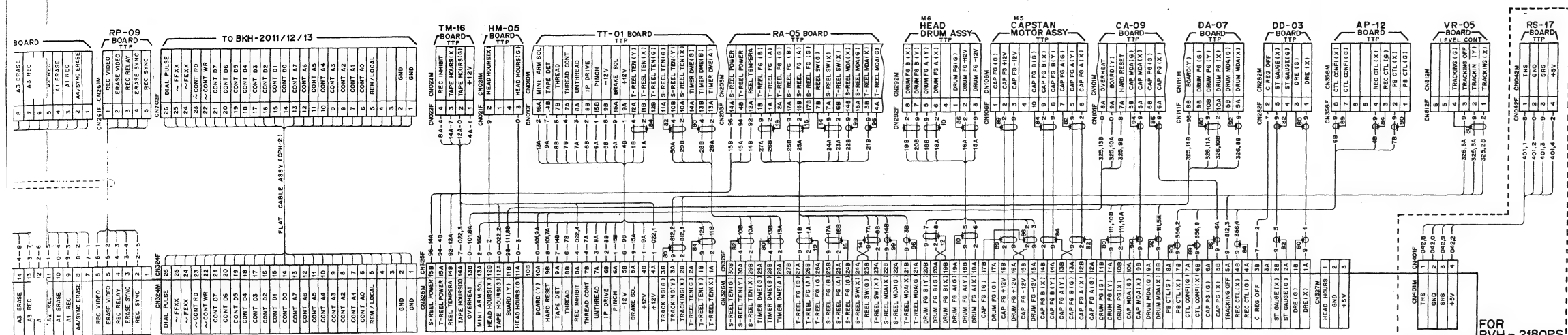


MB-14A BOARD
 Mother Board


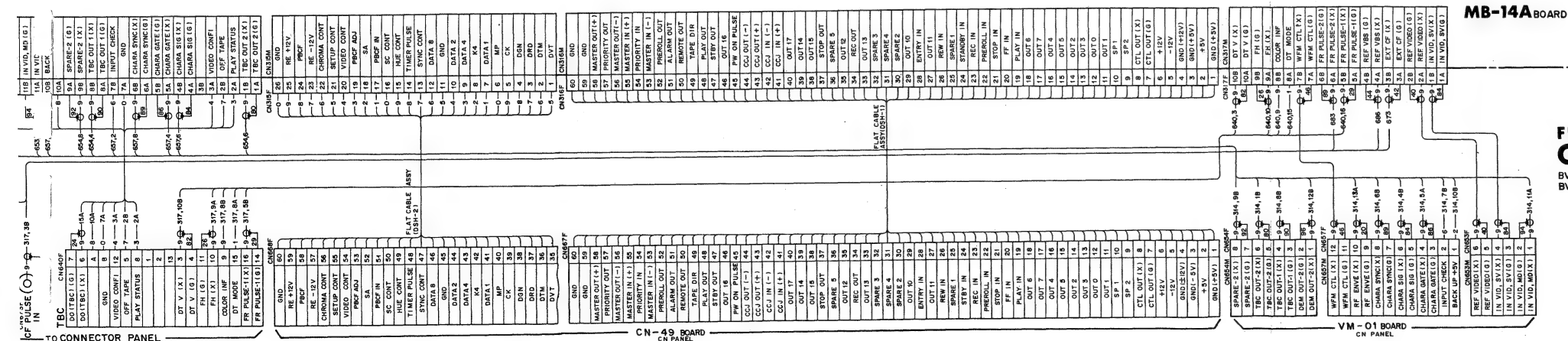
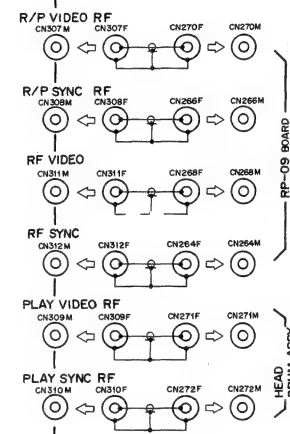
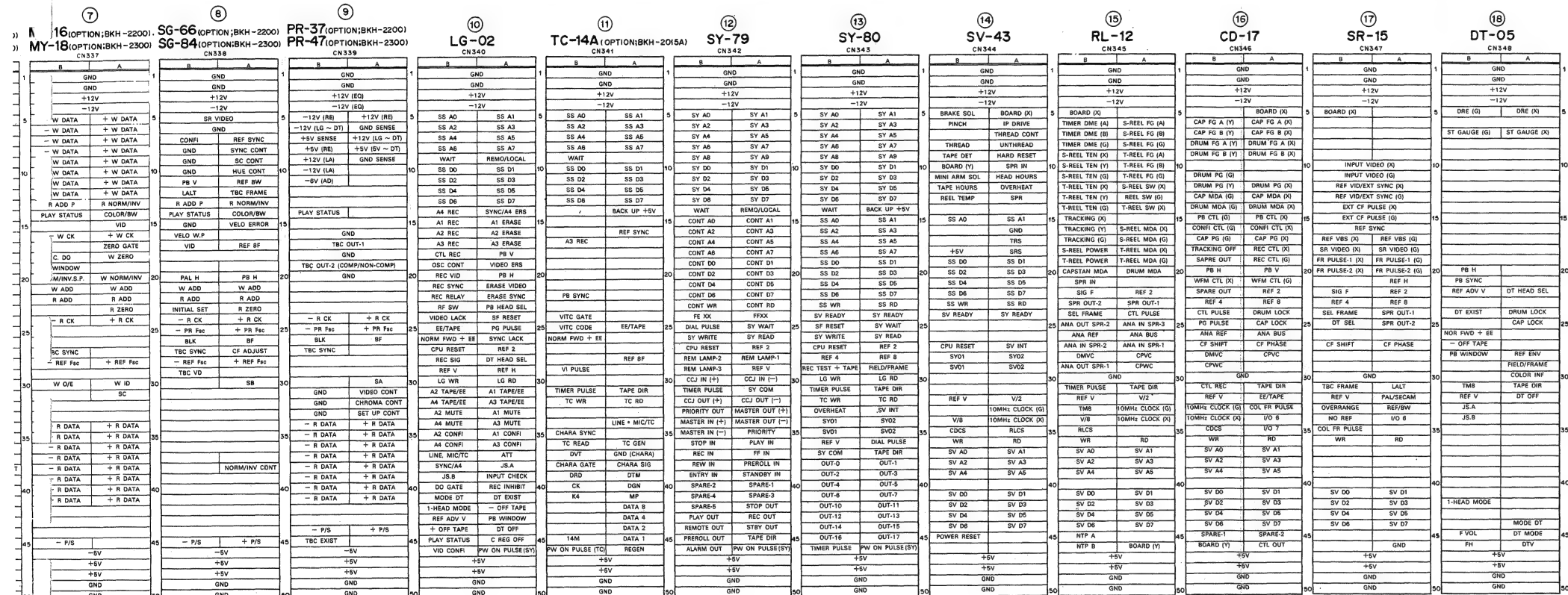


FRAME WIRING; CARD RACK; FOR 00/02 MODELS

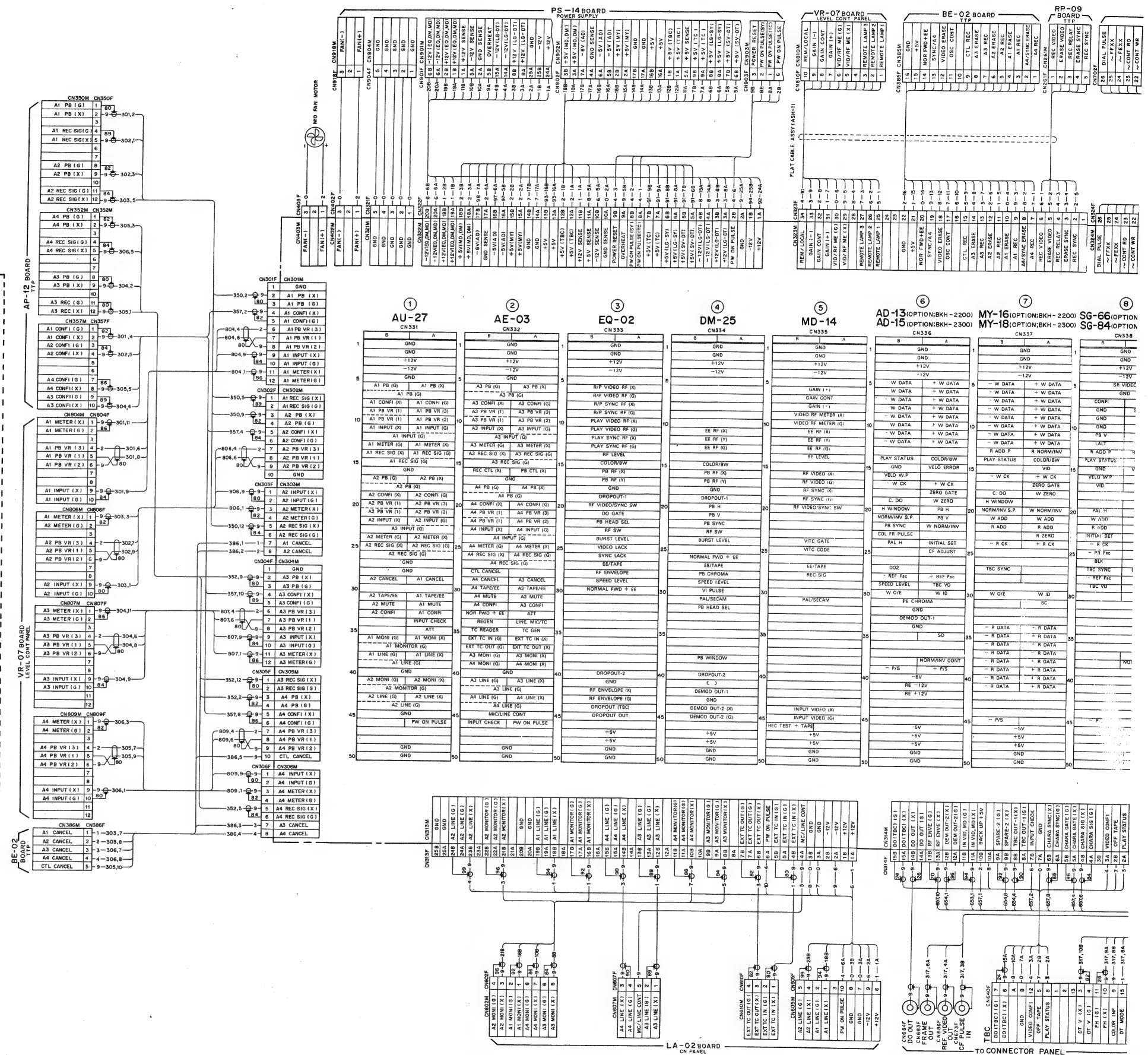
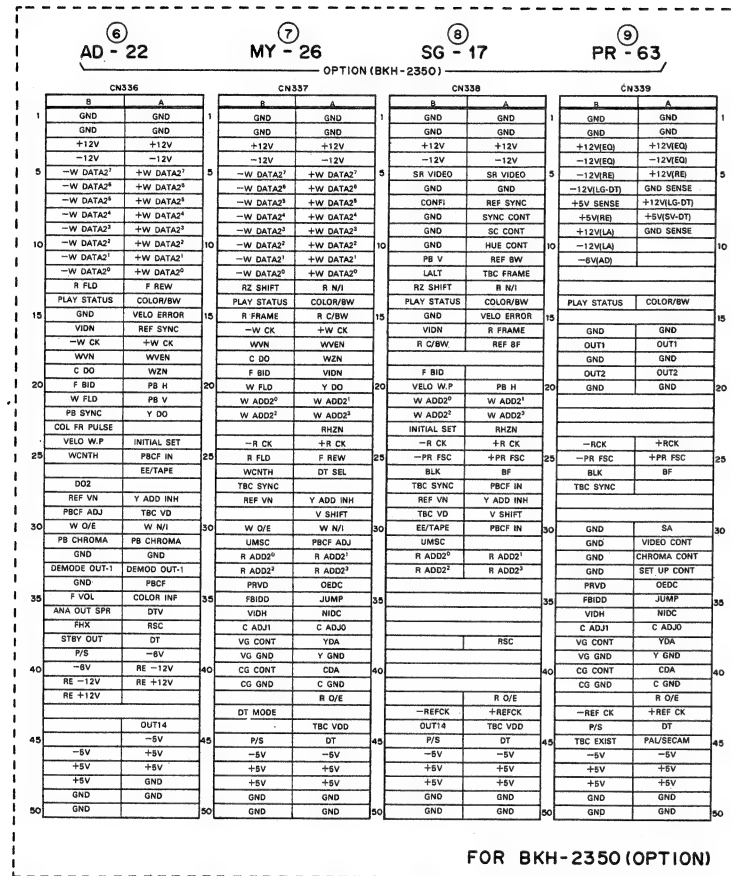


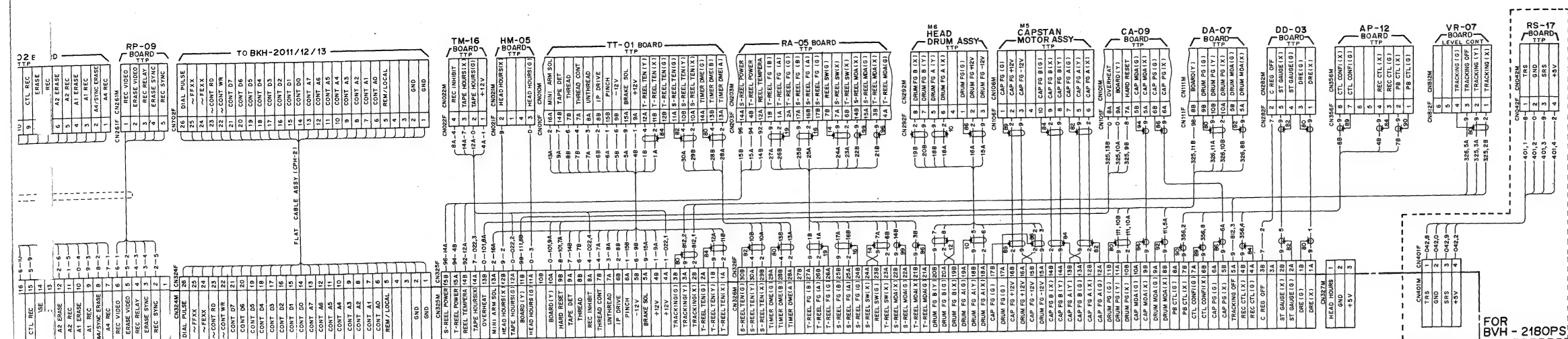


FOR BVH-2180PS

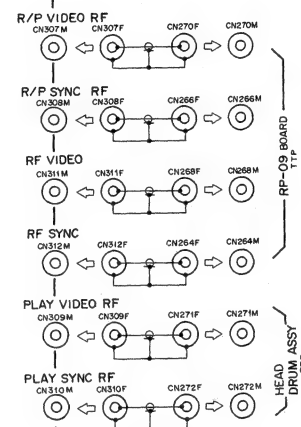
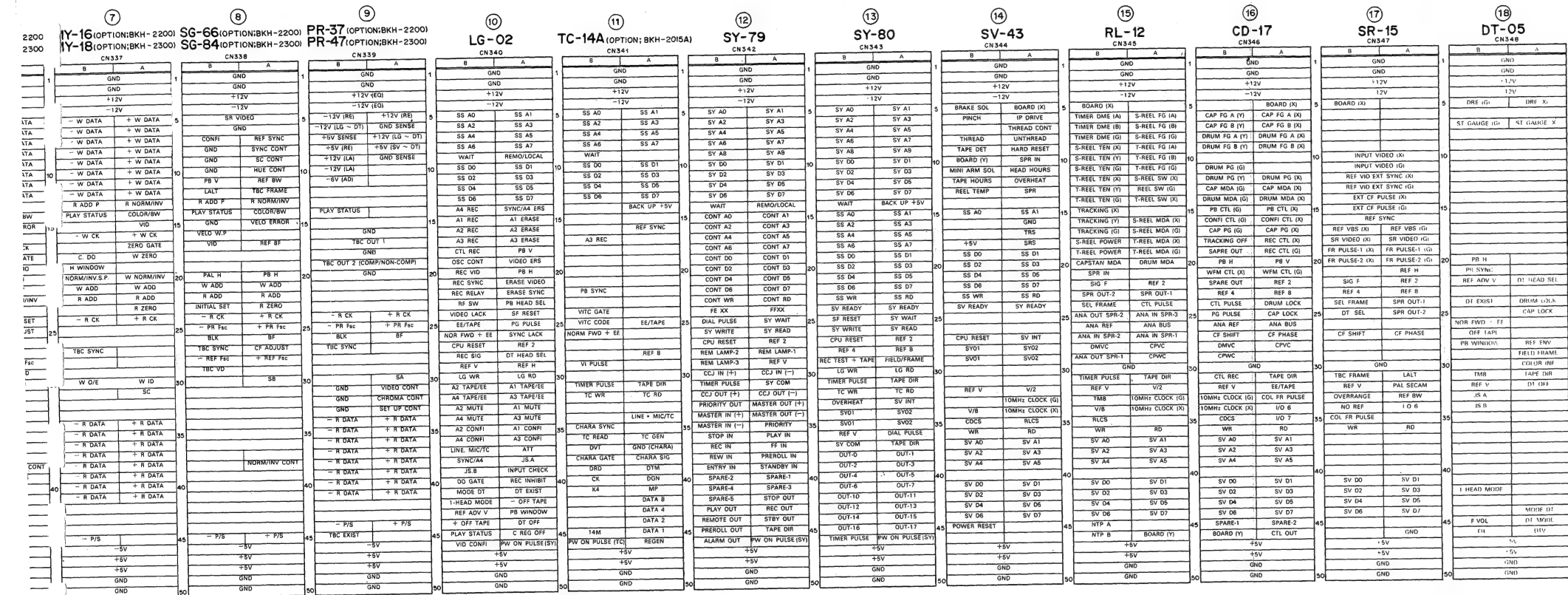
FRAME WIRING
CARD RACK (00/02)BVH-2000PS; #33401-
BVH-2180PS; #10001-

FRAME WIRING; CARD RACK; FOR 04 MODEL



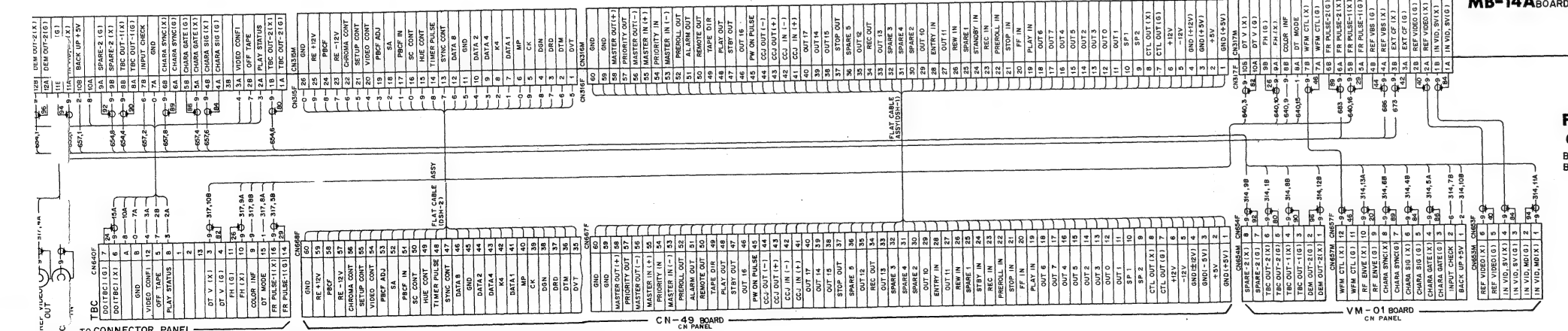


FOR BVH - 2180PS

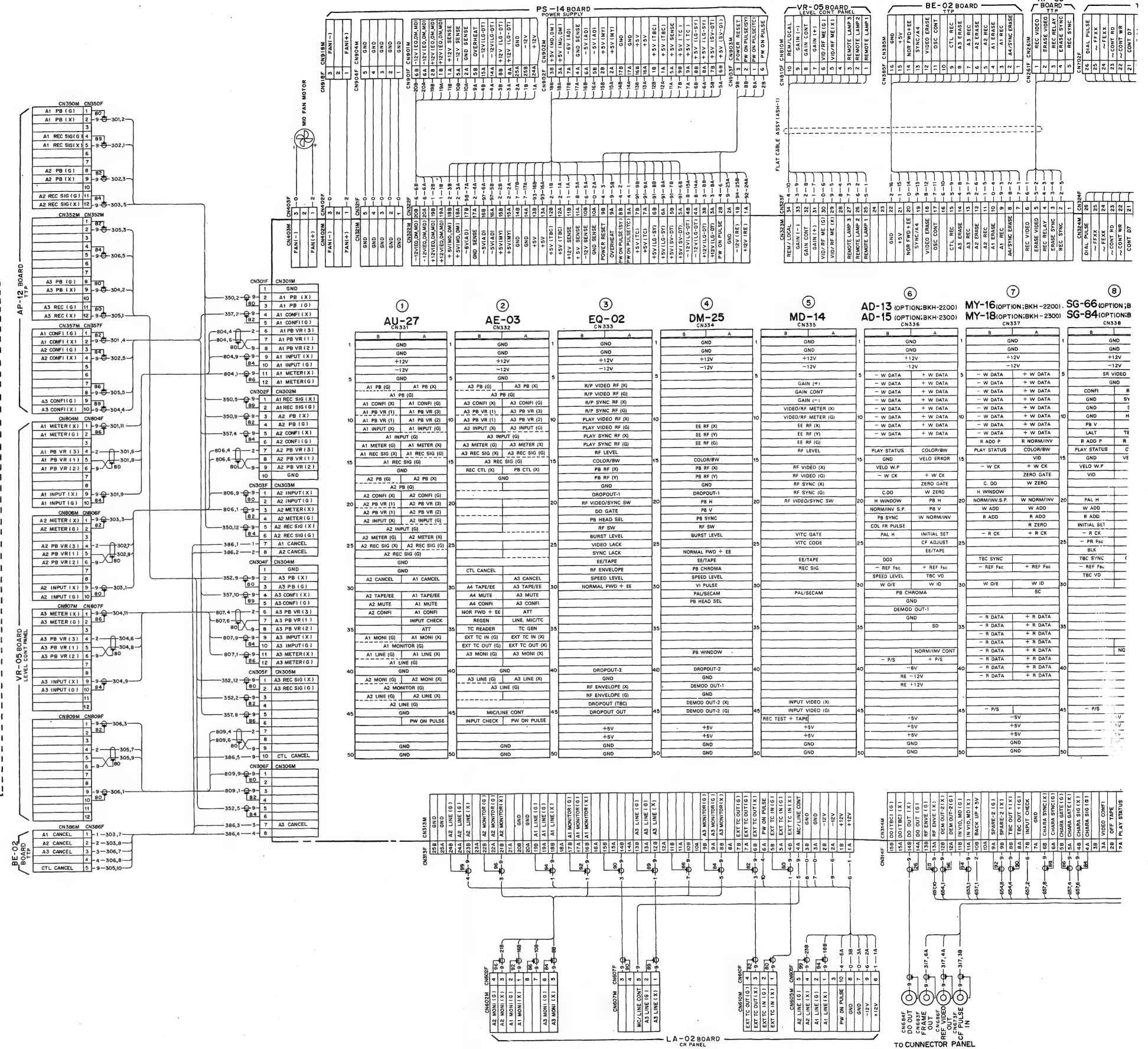
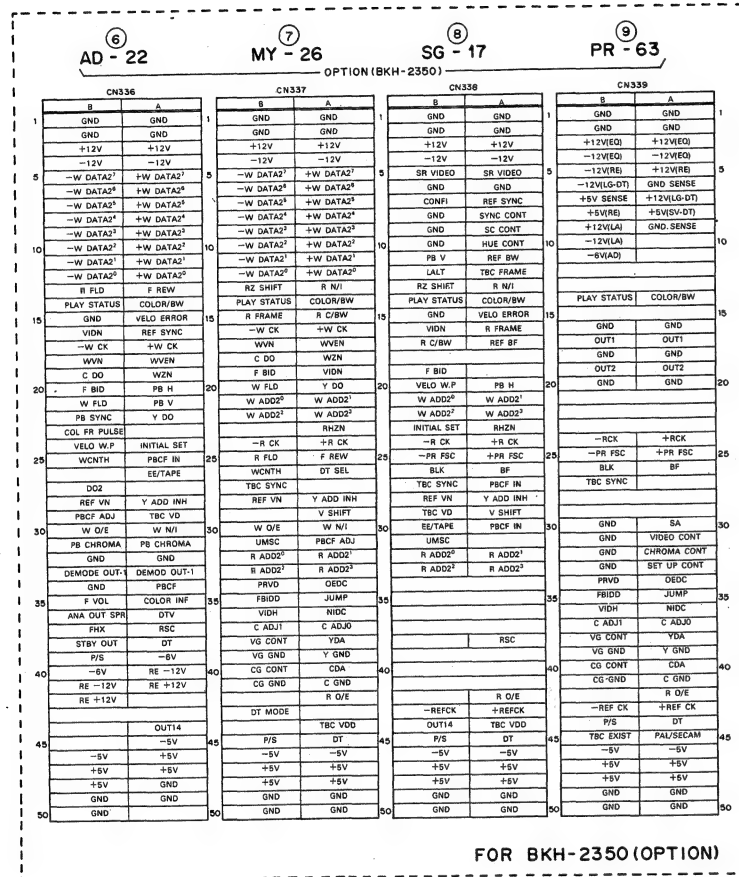


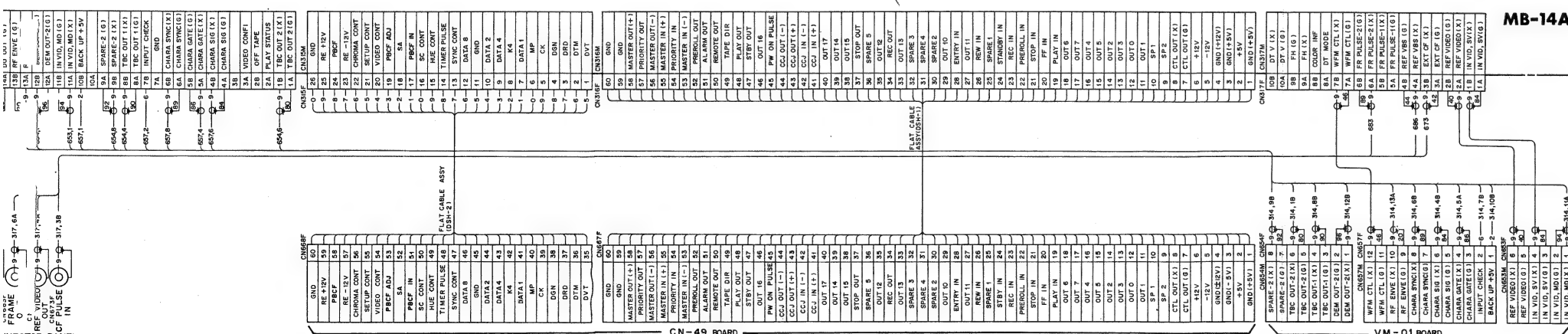
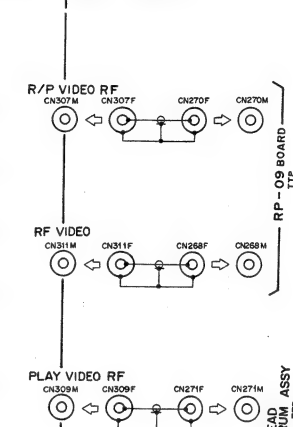
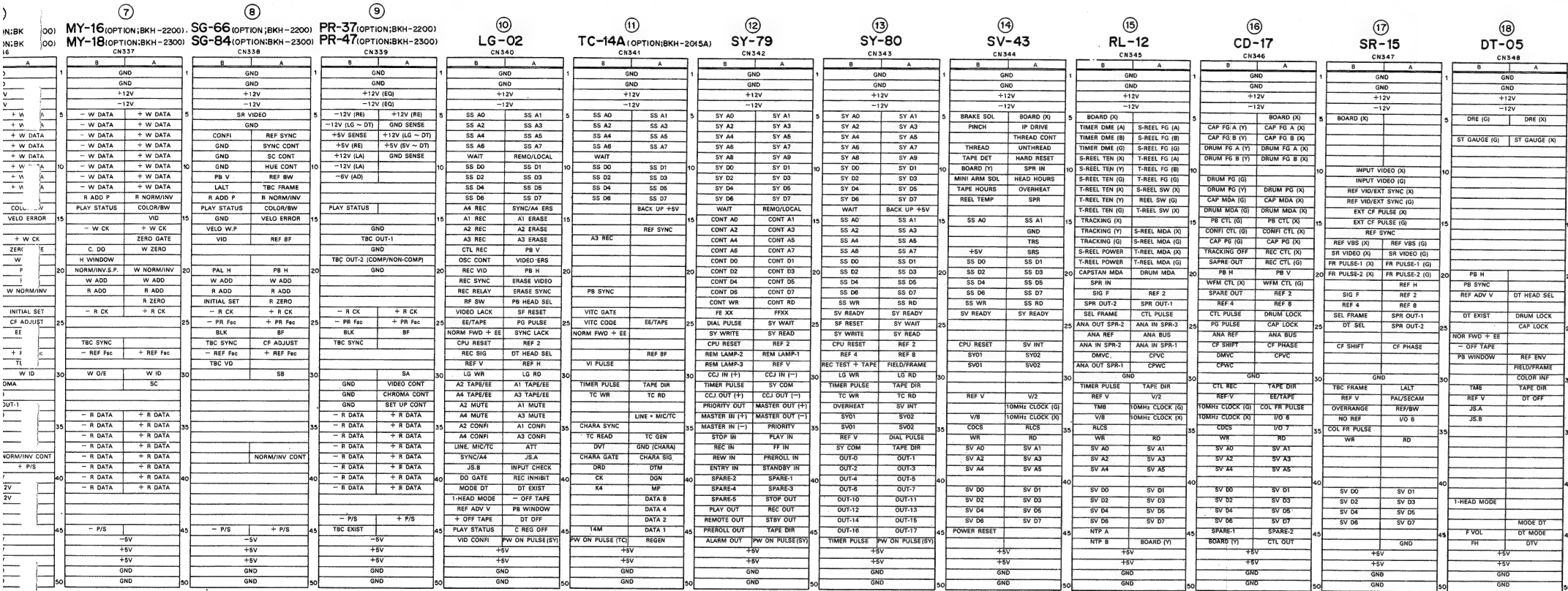
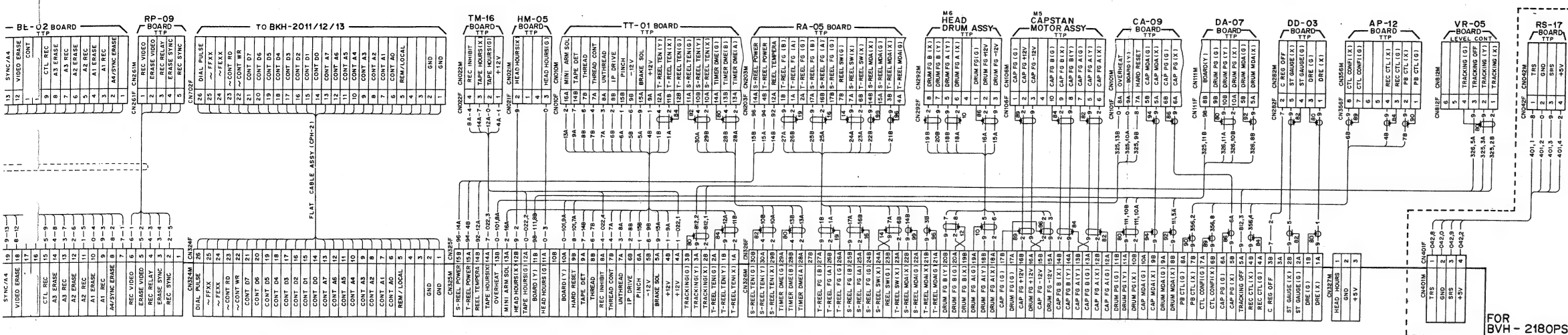
RP-05 BOARD

HEAD DRUM ASSY

FRAME WIRING
CARD RACK (04)BVH-2000PS (FOR 04); #33401-
BVH-2180PS (FOR 04); #10001-

FRAME WIRING; CARD RACK; FOR 10/12 MODELS





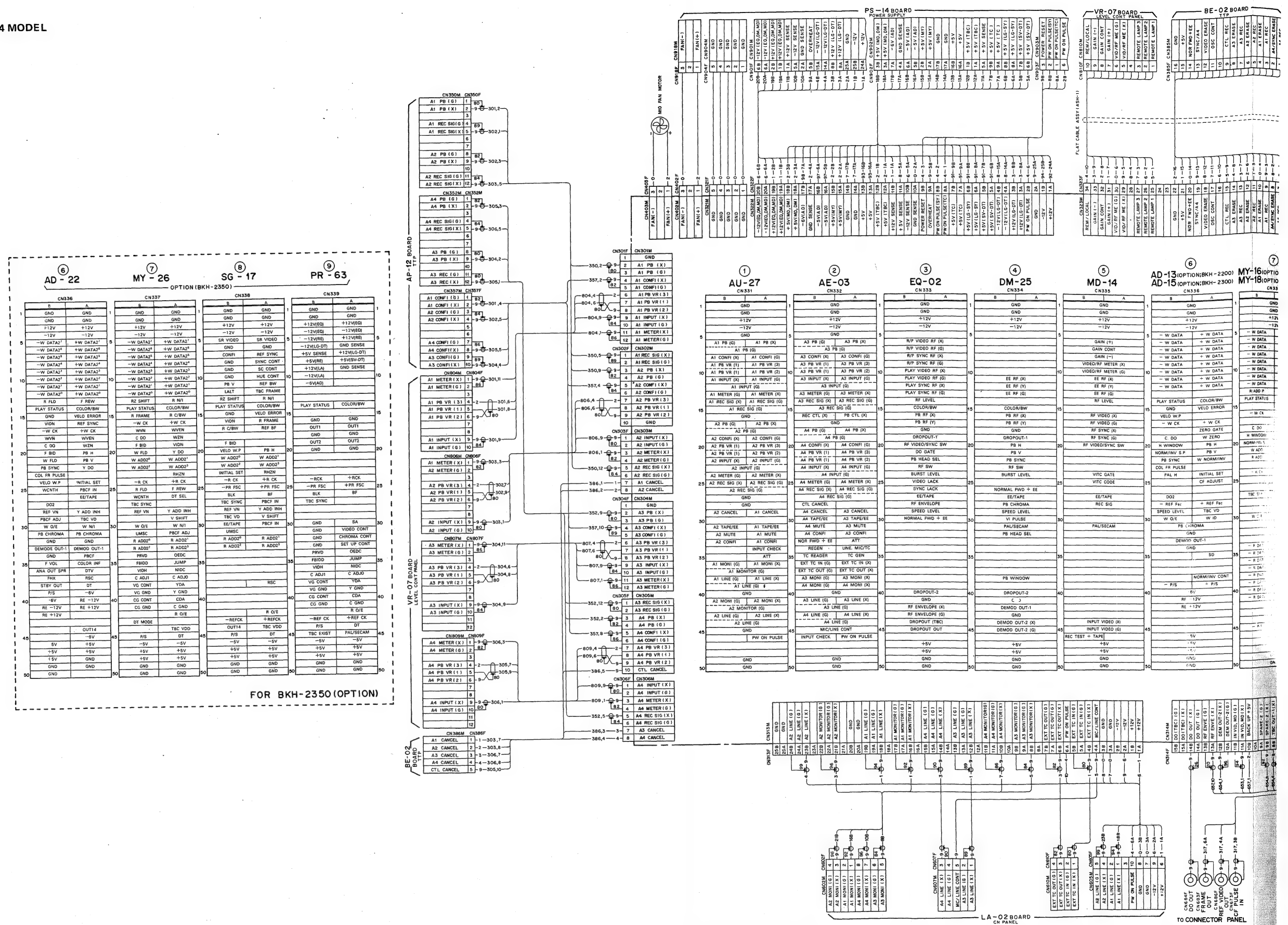
MB-14A BOARD

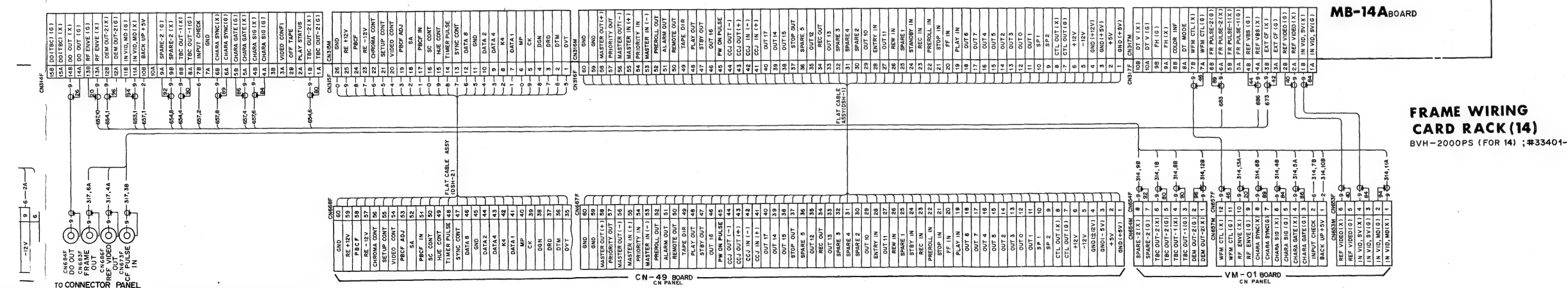
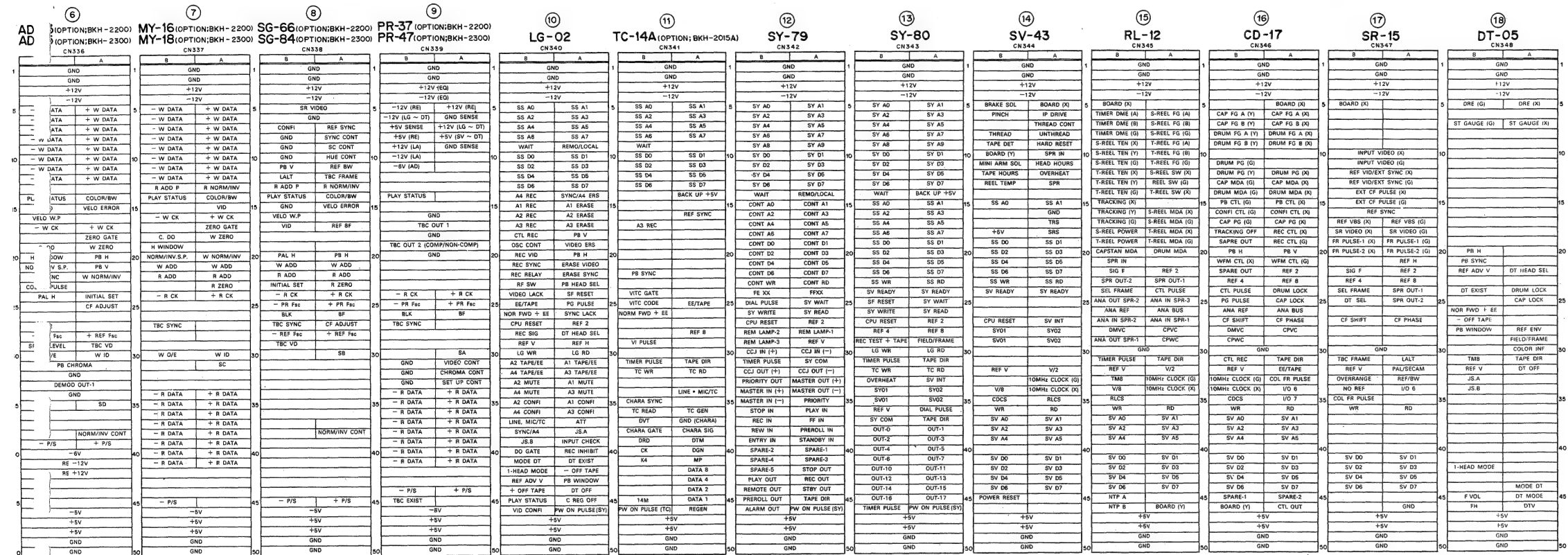
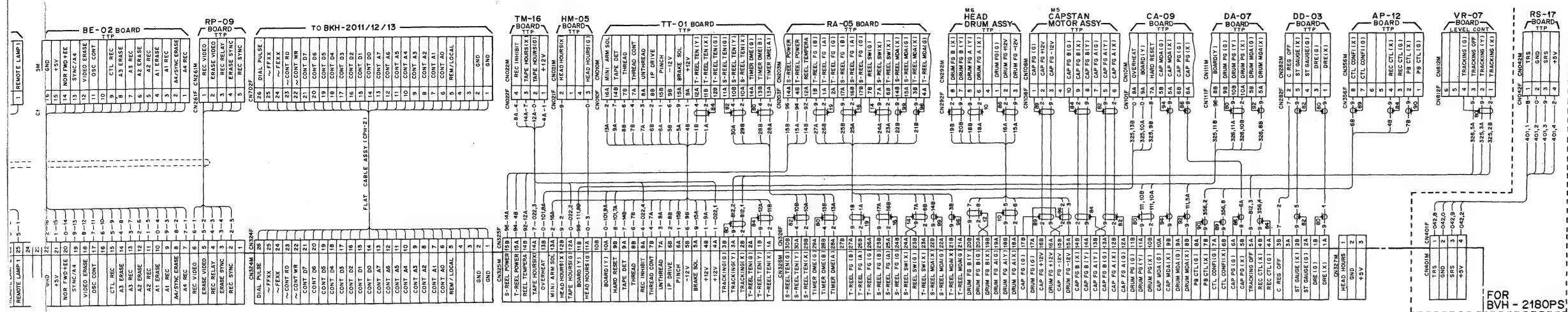
FRAME WIRING
CARD RACK (10/12)
BVH-2000PS; #33401-

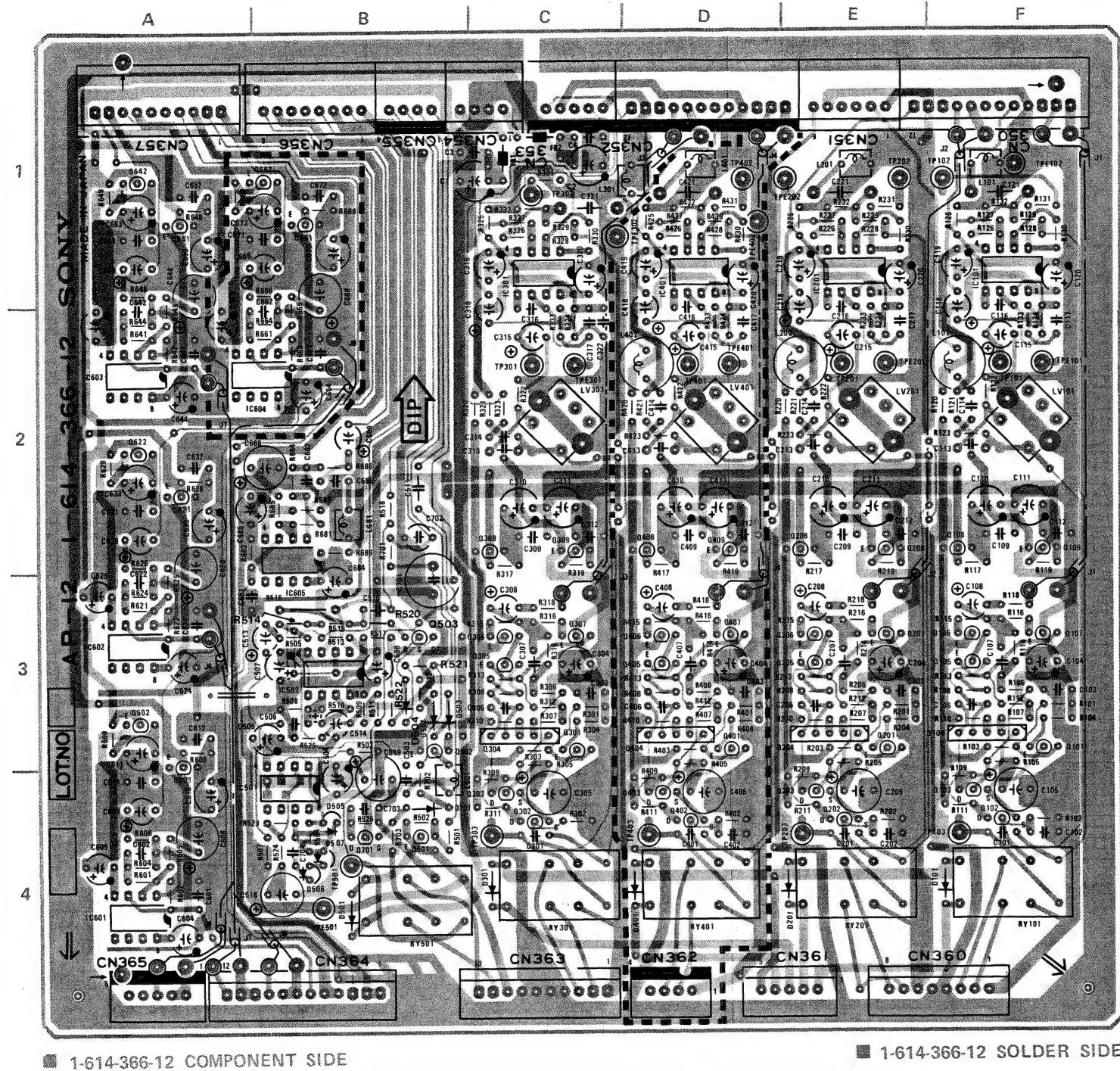
C-114 (12/17)

C-114 (13/17)

FRAME WIRING; CARD RACK; FOR 14 MODEL



FRAME WIRING
CARD RACK (14)
BVH-2000PS (FOR 14); #33401-

AP-12 BOARD (1-614-366-11 & UP)
Component Side**AP-12 (1-614-366-11 & UP)**BVH-2000/PM
BVH-2180/PMBVH-2000PS
BVH-2180PS
(00/10/02/12 MODEL)

BVH-2500/P

CN350M Q307 3C
1F Q308 2C
CN351M Q309 2C
1E Q501 4B
CN352M Q502 3BCN353M (PS)
1C Q503 3BCN354M Q601 3A
CN355M Q602 3ACN356M Q621 2A
1B Q622 2ACN357M Q641 1A
1A Q642 1ACN360M Q701 4B
4F RY101 4FCN361M RY201 4E
4E RY301 4CCN363M RY501 4B
4CCN364M TP101 2F
4B TP102 1FD101 4F TP103 4F
D201 4E TP201 2ED301 4C TP202 1E
D501 4B TP203 4ED502 3B TP301 2C
D503 3B TP302 1CD504 3B TP303 4C
D505 4B TP501 4B(PS) TPE101
D504 3B 2FD505 4B TPE102
D506 4B 1FD507 4B TPE201
D701 4B 2EFB1 1C TPE202
FB2 1C 1EIC101 1F TPE301
IC201 1E 2CIC301 1C TPE302
IC501 4B 1DIC502 3B TPE501
IC601 4A 4BIC602 3A IC603 2A
IC603 2A IC605 2BIC605 2B LV101 2F
LV101 2F LV201 2ELV201 2E LV301 2C
LV301 2C LV401 2DQ101 3F Q102 4F
Q102 4F Q103 4FQ103 4F Q104 3F
Q104 3F Q105 3FQ105 3F Q106 3F
Q106 3F Q107 3FQ107 3F Q108 2F
Q108 2F Q109 2FQ109 2F Q201 3E
Q201 3E Q202 4EQ202 4E Q203 4E
Q203 4E Q204 3EQ204 3E Q205 3E
Q205 3E Q206 3EQ206 3E Q207 3E
Q207 3E Q208 2EQ208 2E Q209 2E
Q209 2E Q301 3CQ301 3C Q302 4C
Q302 4C Q303 4CQ303 4C Q304 3C
Q304 3C Q305 3C

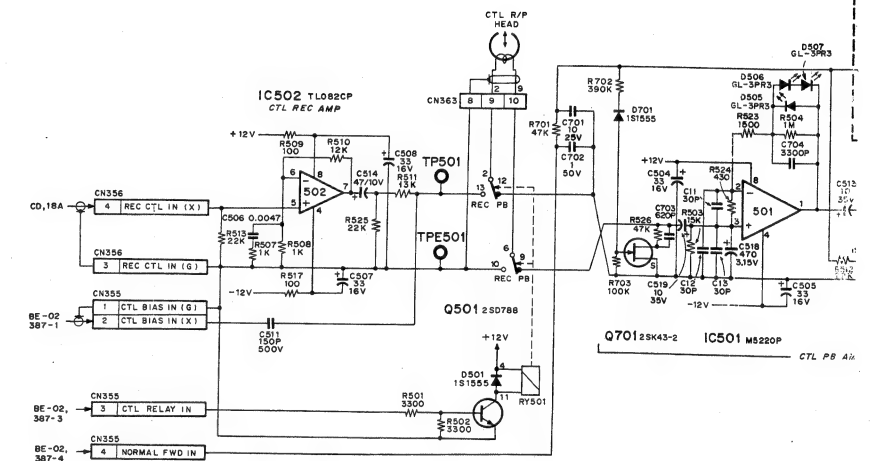
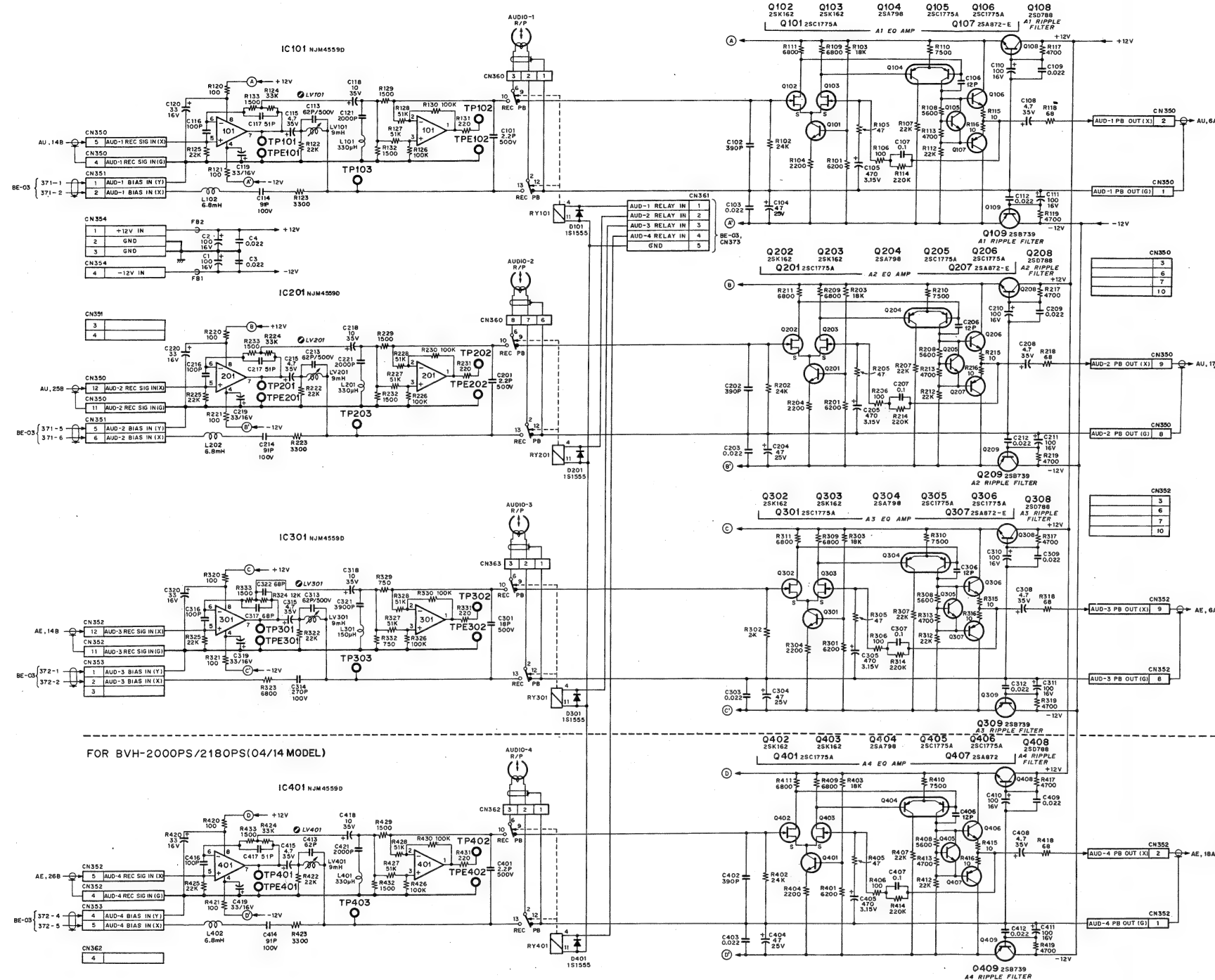
Q305 3C Q306 3C

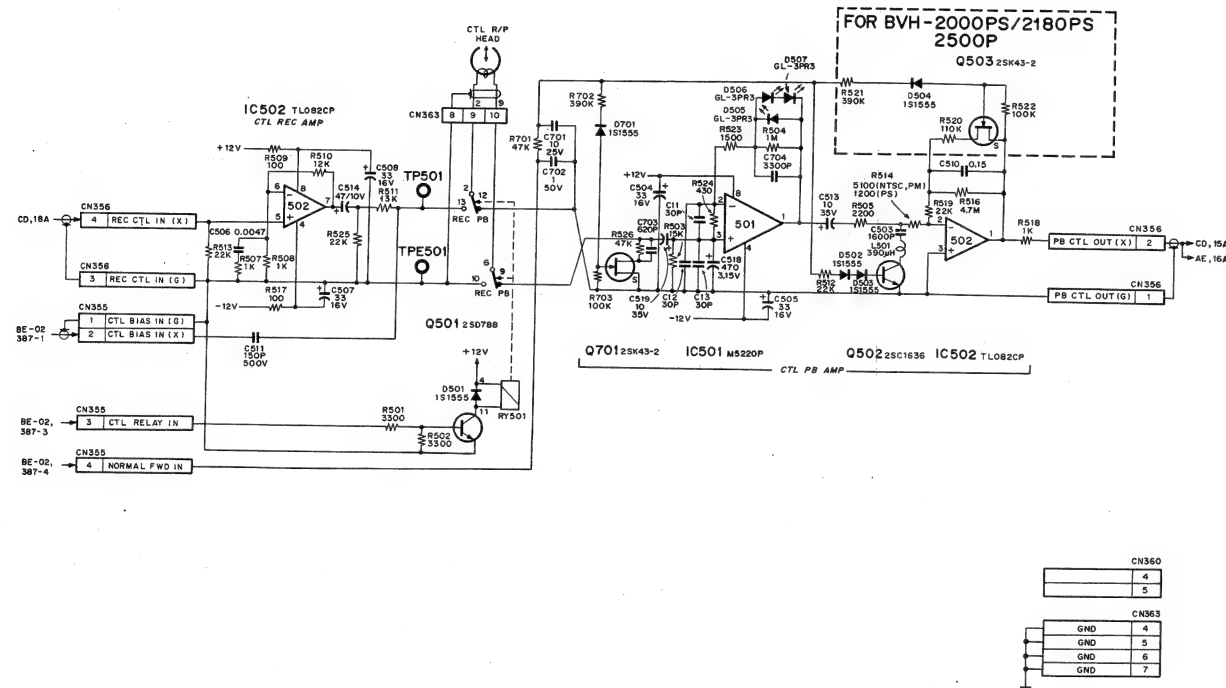
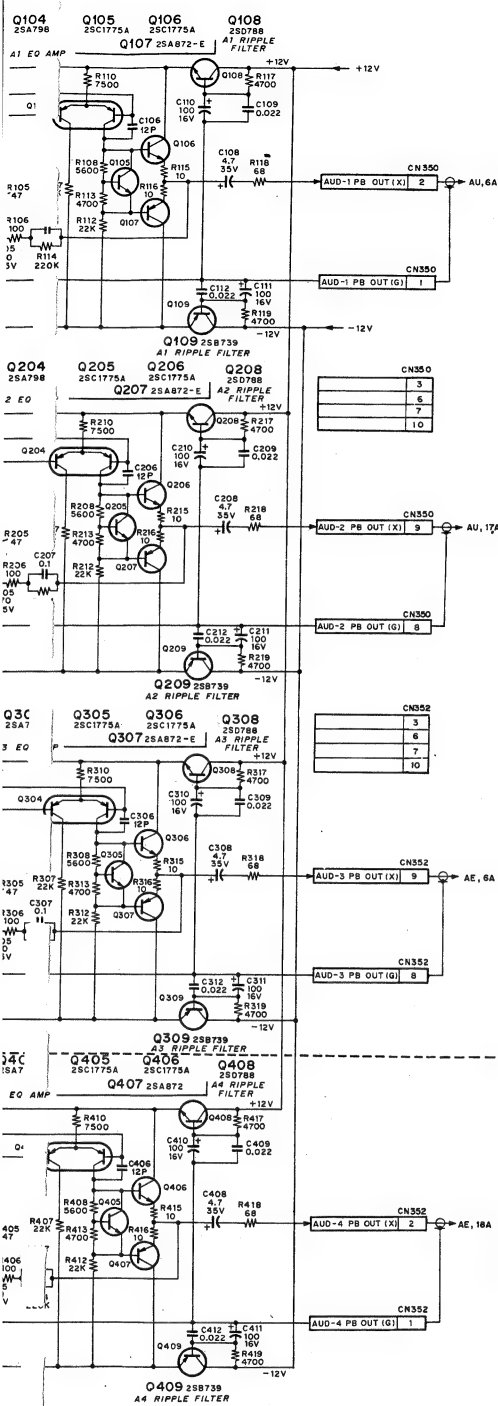
AP-12 (1-614-366-11 & UP)BVH-2000PS
BVH-2180PS
(04/14 MODEL)CN350M Q306 3C
1F Q307 3CCN351M Q308 2C
1E Q309 2CCN352M Q401 3D
1D Q402 4DCN353M Q403 4D
1C Q404 3DCN354M Q405 3D
1C Q406 3DCN355M Q407 3D
1B Q408 2DCN356M Q409 2D
1B Q501 4BCN357M Q502 3B
1A Q503 3BCN360M Q601 3A
4F Q602 3ACN361M Q621 2A
4E Q622 2ACN362M Q641 1A
4D Q642 1ACN363M Q661 1B
4C Q662 1BCN364M Q701 4B
4B RY101 4FD101 4F RY201 4E
D201 4E RY301 4CD301 4C RY401 4D
D501 4B RY501 4BD502 3B TP101 2F
D503 3B TP102 1FD504 3B TP103 4F
D505 4B TP201 2ED506 4B TP202 1E
D701 4B TP203 4EFB1 1C TP301 2C
FB2 1C TP302 1CIC101 1F TP303 4C
IC201 1E TP501 4BIC301 1C TPE101
IC501 4B 2FIC502 3B TPE102
IC601 4A 1FIC602 3A TPE201
IC603 2A 2EIC605 2B TPE202
LV101 2F 1ELV201 2E TPE301
LV301 2C 2CLV401 2D TPE302
Q101 3F 1DQ102 4F TPE401
Q103 4F 2DQ104 3F TPE402
Q105 3F 1DQ106 3F TPE501
Q107 3F 4BQ108 2F Q201 3E
Q109 2F Q202 4EQ201 3E Q203 4E
Q202 4E Q204 3EQ203 4E Q205 3E
Q204 3E Q206 3EQ205 3E Q207 3E
Q206 3E Q208 2EQ207 3E Q209 2E
Q208 2E Q301 3CQ209 2E Q302 4C
Q301 3C Q303 4CQ302 4C Q304 3C
Q303 4C Q305 3C

Q304 3C Q306 3C

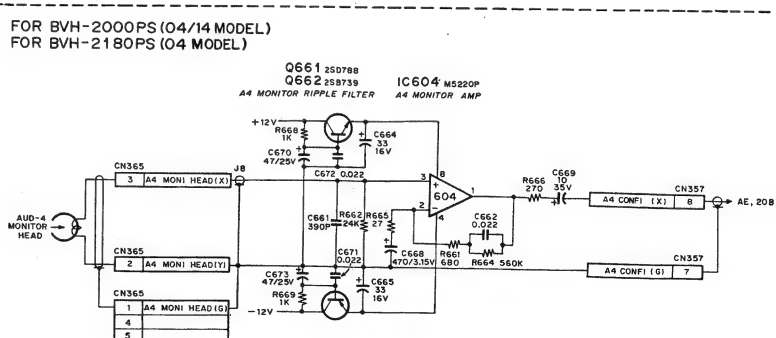
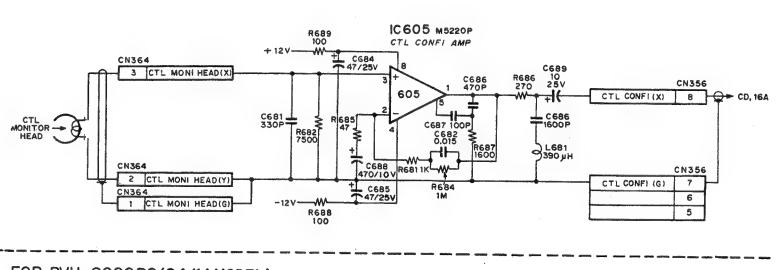
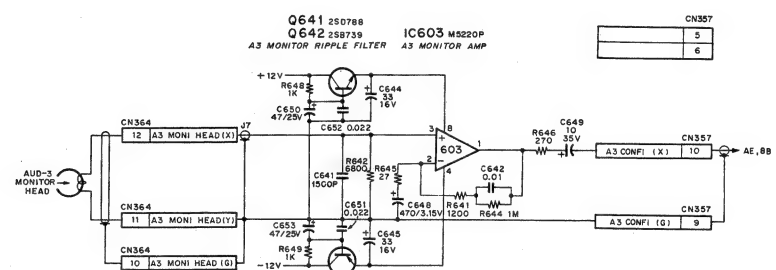
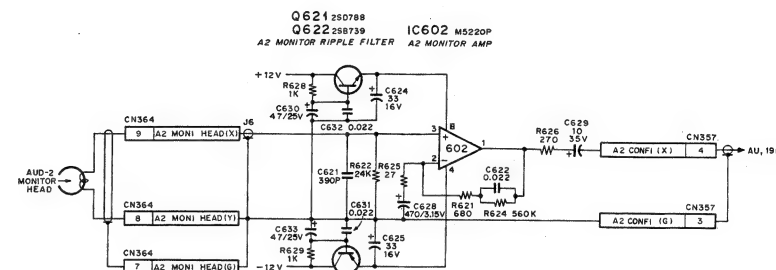
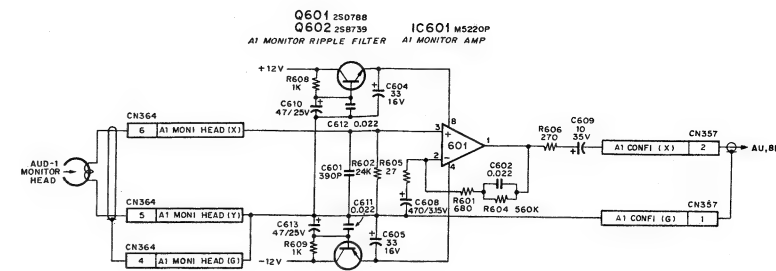
AP-12 BOARD

Audio/CTL, REC/PB Preamplifier



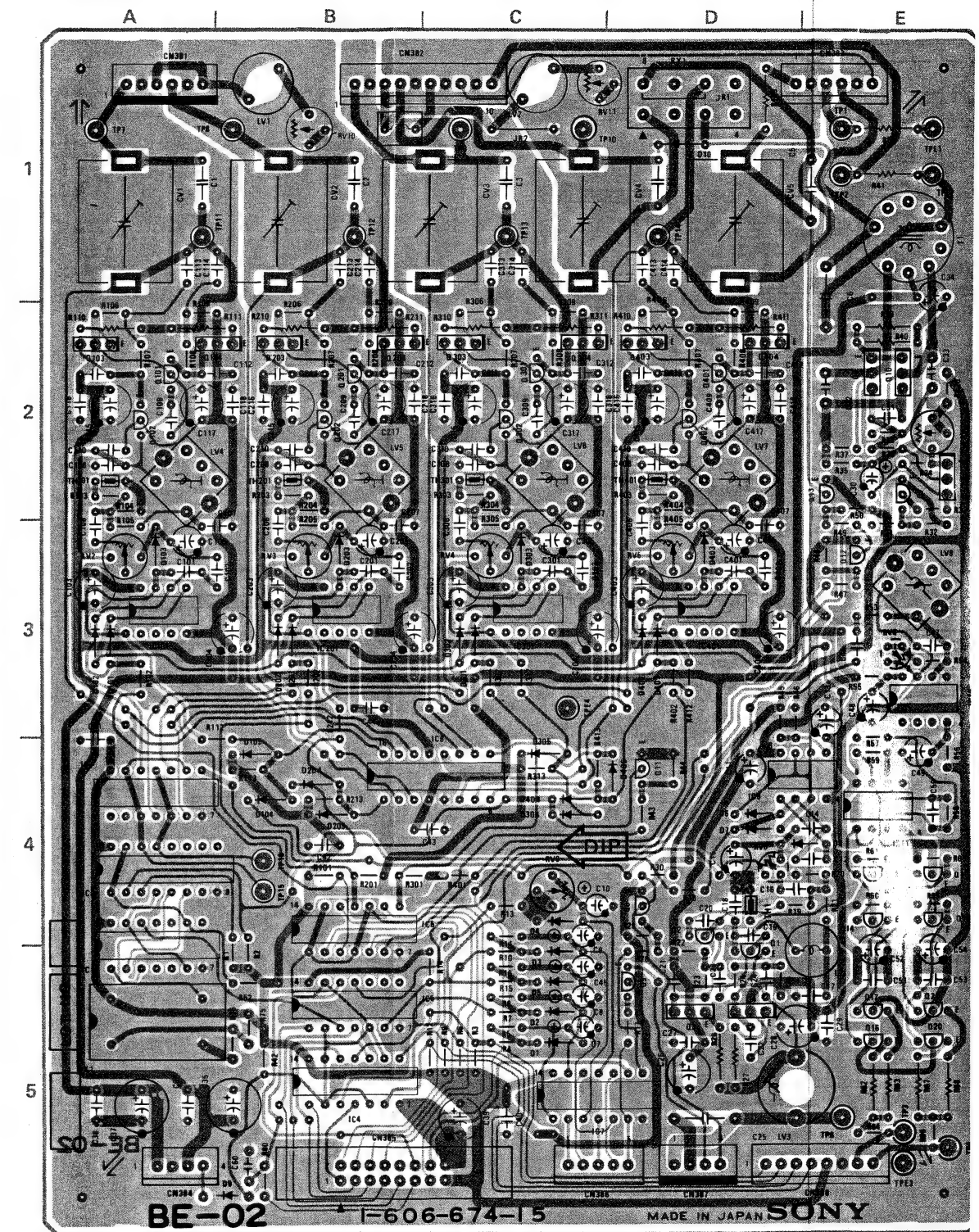


AP-12 BOARD
BOARD NO. 1-614-366-11 & UP
BVH-2000(J); #33301-
BVH-2000(U/C); #33501-
BVH-2000PS; #33401-
BVH-2000PM; #30201-
BVH-2500(J); #11001-
BVH-2500(U/C); #11501-
BVH-2500P; #10701-
BVH-2180(J); #10001-
BVH-2180(U/C); #10001-
BVH-2180PS; #10001-
BVH-2180PM; #10001-



BE-02 BOARD (1-606-674-14, 15)

Component Side

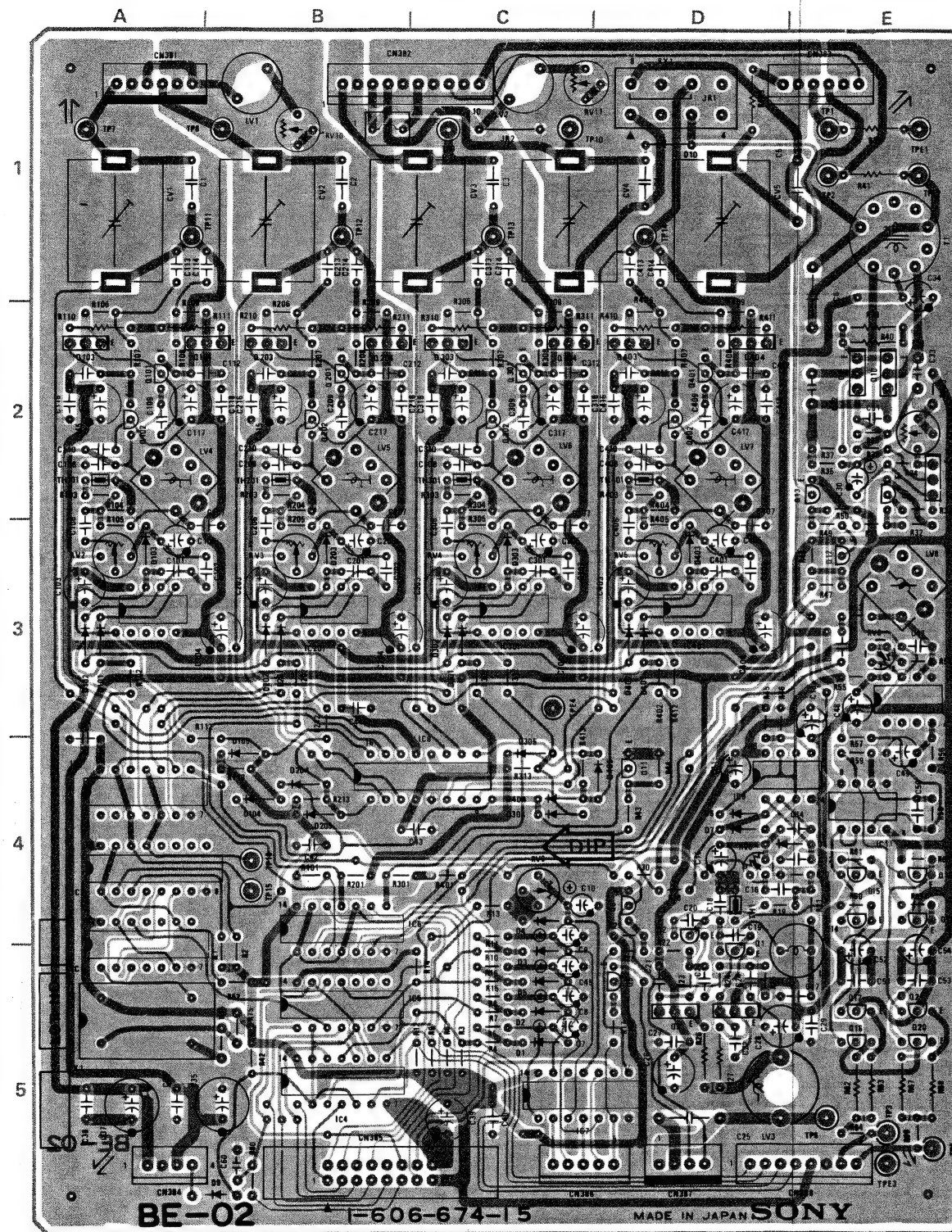


1-606-674-15
COMPONENT SIDE

1-606-674-15
SOLDER SID

BE-02 BOARD (1-606-674-14, 15)

Component Side



1-606-674-15
COMPONENT SIDE

1-606-674-15
SOLDER SIDE

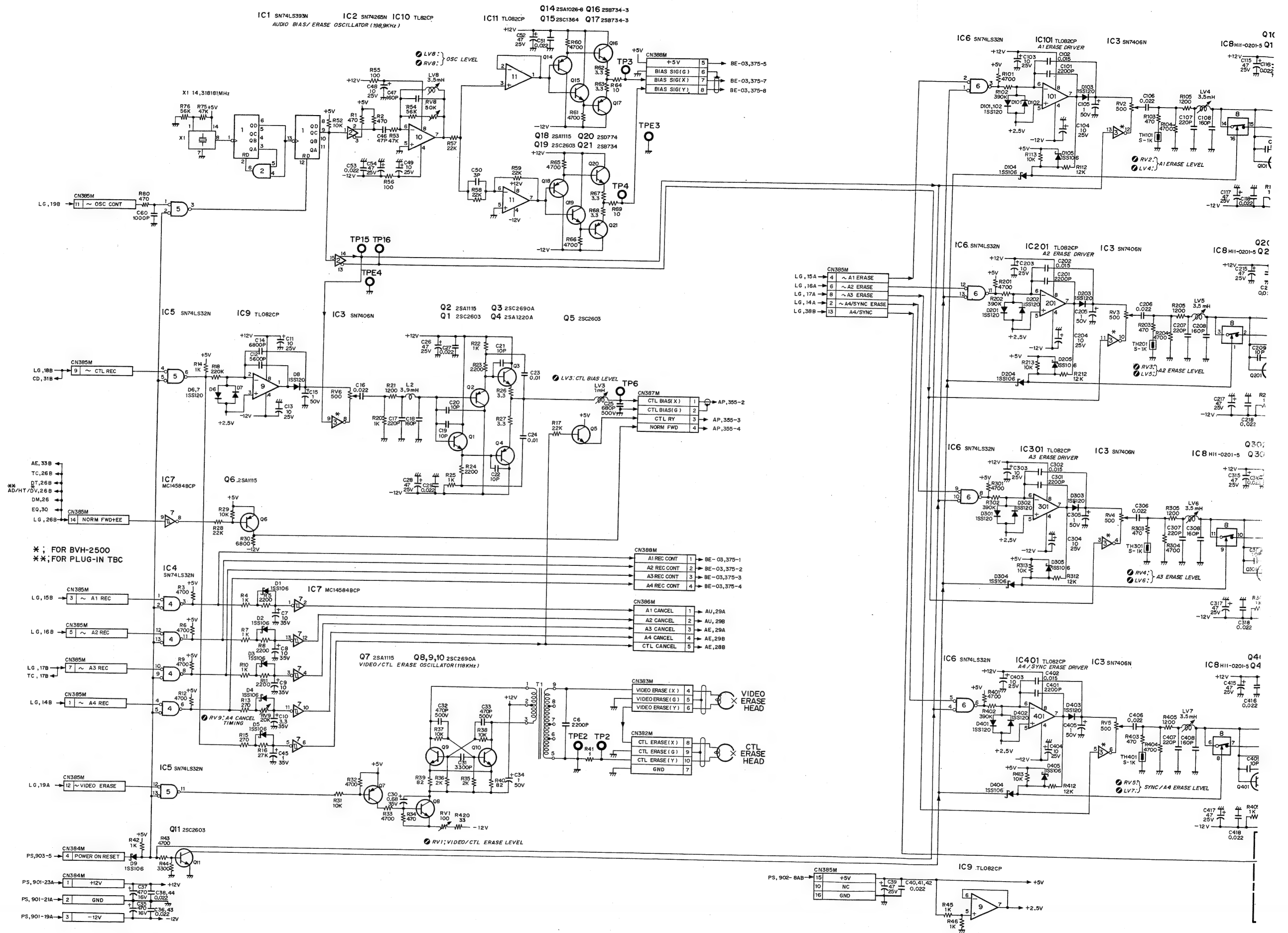
BE-02 (1-606-674-14 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CN381M	Q6	4D
1A	Q7	2E
CN382M	Q8	2E
1C	Q9	2E
CN383M	Q10	2E
1E	Q11	4D
CN384M		
5A	(PS 04 MODEL)	
CN385M	Q12	3E
5B	Q13	2E
CN386M		
5D	Q14	4E
CN387M	Q15	4E
5D	Q16	5E
CN388M	Q17	5E
5E	Q18	4E
	Q19	4E
CV1	Q20	5E
CV2	Q21	5E
CV3	Q101	2A
	Q102	2A
(PS 04 MODEL)	Q103	2A
CV4	Q104	2B
	Q201	2B
CV5	Q202	2B
	Q203	2B
	Q204	2B
D1	Q301	2C
D2	Q302	2C
D3	Q303	2C
D4	Q304	2C
D5	Q401	2D
D6	Q402	2D
D7	Q403	2D
D8	Q404	2D
D9		
D10	RV1	2E
D101	RV2	3A
D102	RV3	3B
D103	RV4	3C
D104	RV5	3D
D105	RV6	4D
D201	RV8	3E
D202	RV9	4C
D203	RV10	1B
D204		
D205		
D301	(PS 04 MODEL)	
D302	RV11	1D
D303		
D304	(PS 04 MODEL)	
D305	RV1	1D
D401		
D402	T1	1E
D403		
D404	TH101	2A
D405	TH201	2B
	TH301	2C
	TH401	2D
IC1		
IC2	TP1	1E
IC3	TP2	1E
IC4	TP3	5E
IC5	TP4	5E
IC6	TP6	5E
IC7	TP7	1A
IC8	TP8	1B
IC9	TP9	1C
IC10		
IC11		
IC101	(PS 04 MODEL)	
IC201	TP10	1C
IC301		
IC401		
	TP11	1A
	TP12	1B
	TP13	1C
	TP14	1D
	TP15	4B
	TP16	4B
L2		
LV1		
(PS 04 MODEL)		
LV2	TPE1	1E
	TPE2	1E
LV3	TPE3	5E
LV4	TPE4	3C
LV5		
LV6	X1	5A
LV7		
LV8		
Q1		
Q2		
Q3		
Q4		
Q5		

BE-02 BOARD

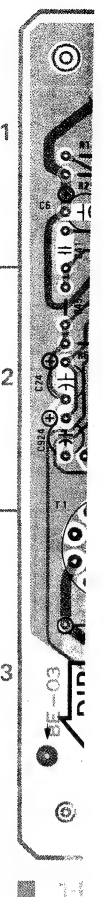
Audio Bias/Erase Oscillator





BE-03

Col



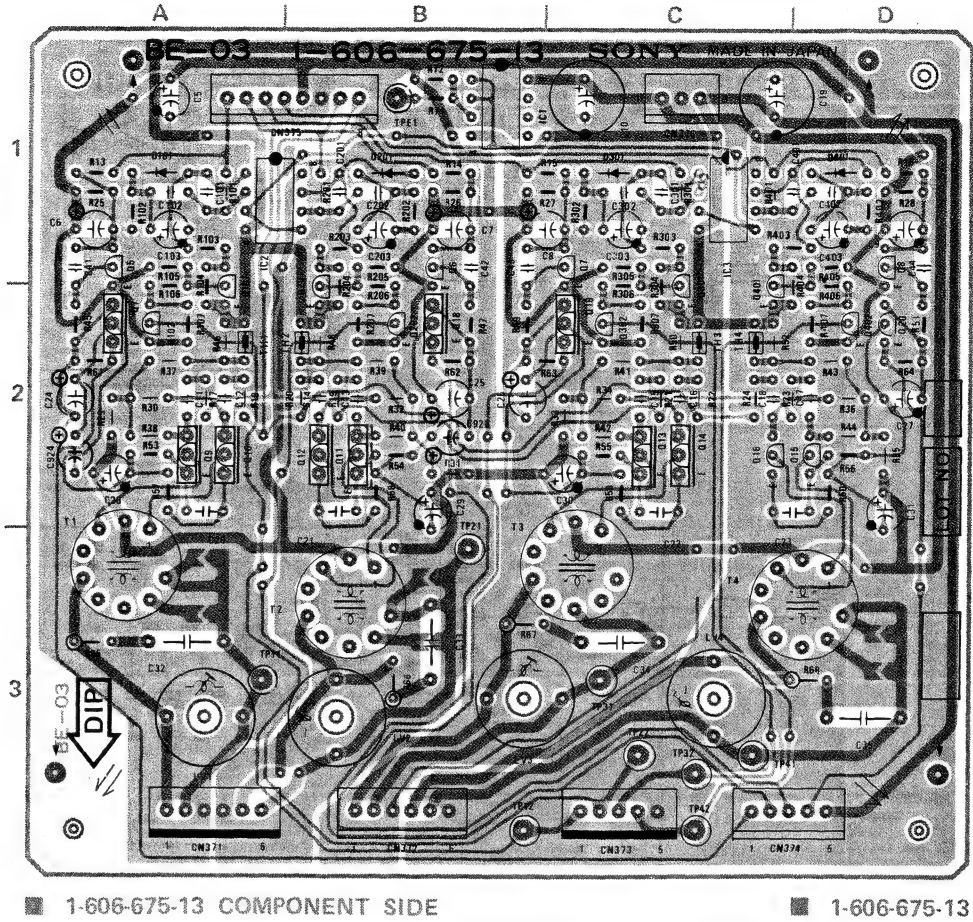
BE-04

Cc





BE-03 BOARD (1-606-675-12, 13)
Component Side

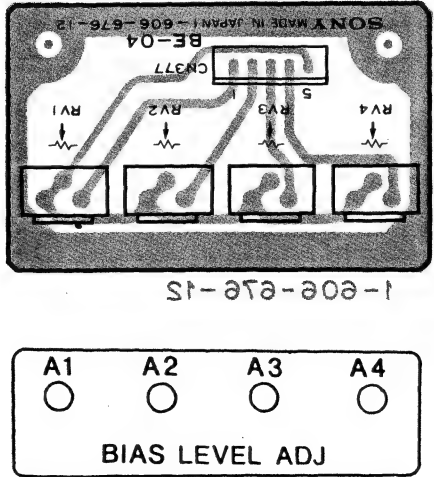


BE-03 (1-606-675-12 & UP)

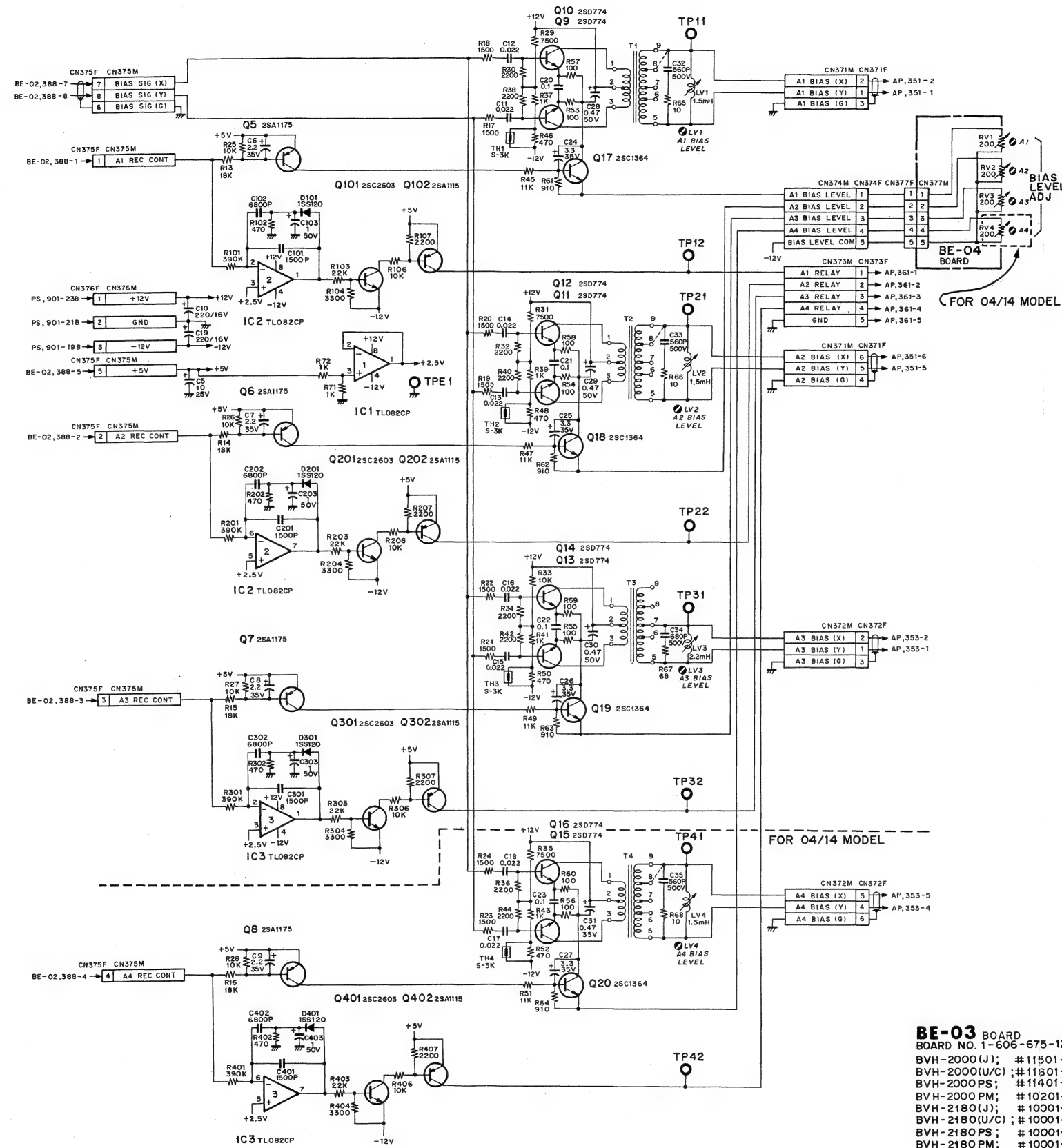
BVH-2800/PS/PM
BVH-2830/PS/PM
BVH-2500P

CN371M	Q17	2A
CN372M	Q18	2B
CN373M	Q19	2C
CN374M	(PS 04 MODEL)	
CN375M	Q20	2D
CN376M	Q101	1A
	Q102	2A
	Q201	1B
	Q202	2B
	Q301	1C
	Q302	2C
D101	1A	
D201	1B	(PS 04 MODEL)
D301	1C	Q401 1D
		Q402 2D
(PS 04 MODEL)		
D401	1D	TH1 2A
		TH2 2B
		TH3 2C
IC1	1B	
IC2	1A	
IC3	1C	(PS 04 MODEL)
		TH4 2C
LV1	3A	
LV2	3B	TP11 3A
LV3	3C	TP12 3B
		TP21 3B
(PS 04 MODEL)		TP22 3C
LV4	3C	TP31 3C
		TP32 3C
Q5	1A	
Q6	1B	(PS 04 MODEL)
Q7	1C	TP41 3C
		TP42 3C
(PS 04 MODEL)		
Q8	1D	TPE1 1B
Q9	2A	
Q10	2A	
Q11	2B	
Q12	2B	
Q13	2C	
Q14	2C	
(PS 04 MODEL)		
Q15	2D	
Q16	2C	

BE-04 BOARD (1-606-676-12)
Component Side



BE-03/BE-04 BOARD
 Audio Bias Amplifier
 Audio Bias Level Adj.



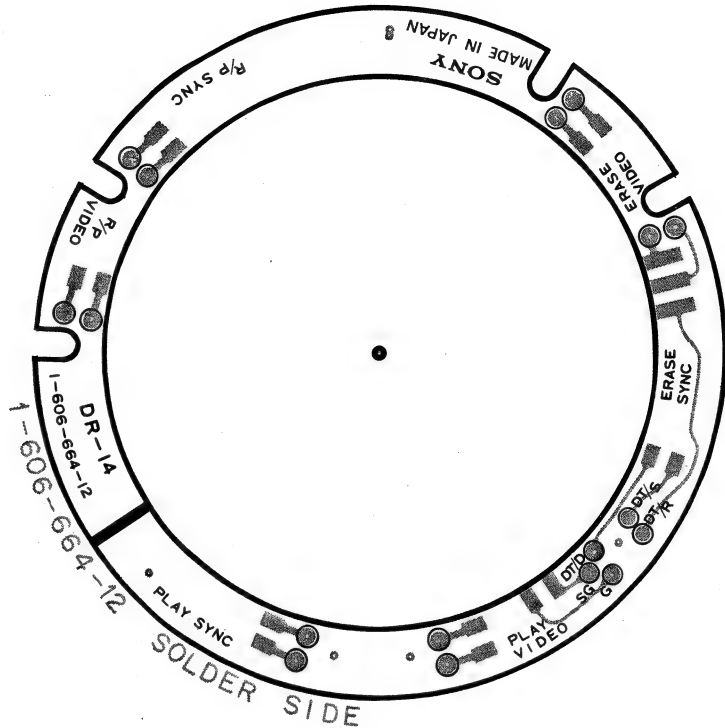
DR-13 BOARD (1-606-663-11)

Component Side



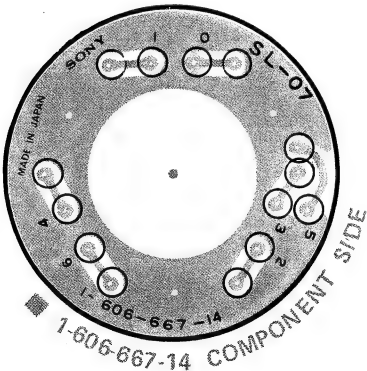
DR-14 BOARD (1-606-664-12)

Solder Side



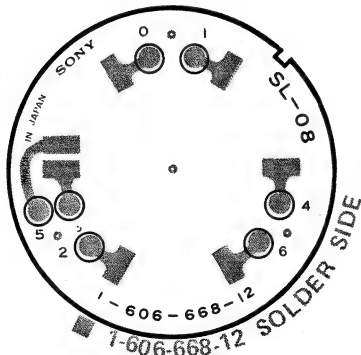
SL-07 BOARD (1-606-667-14)

Component Side



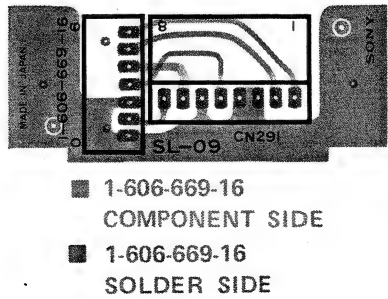
SL-08 BOARD (1-606-668-12)

Solder Side



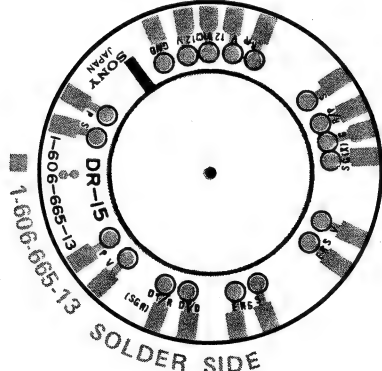
SL-09 BOARD (1-606-669-16)

Component Side



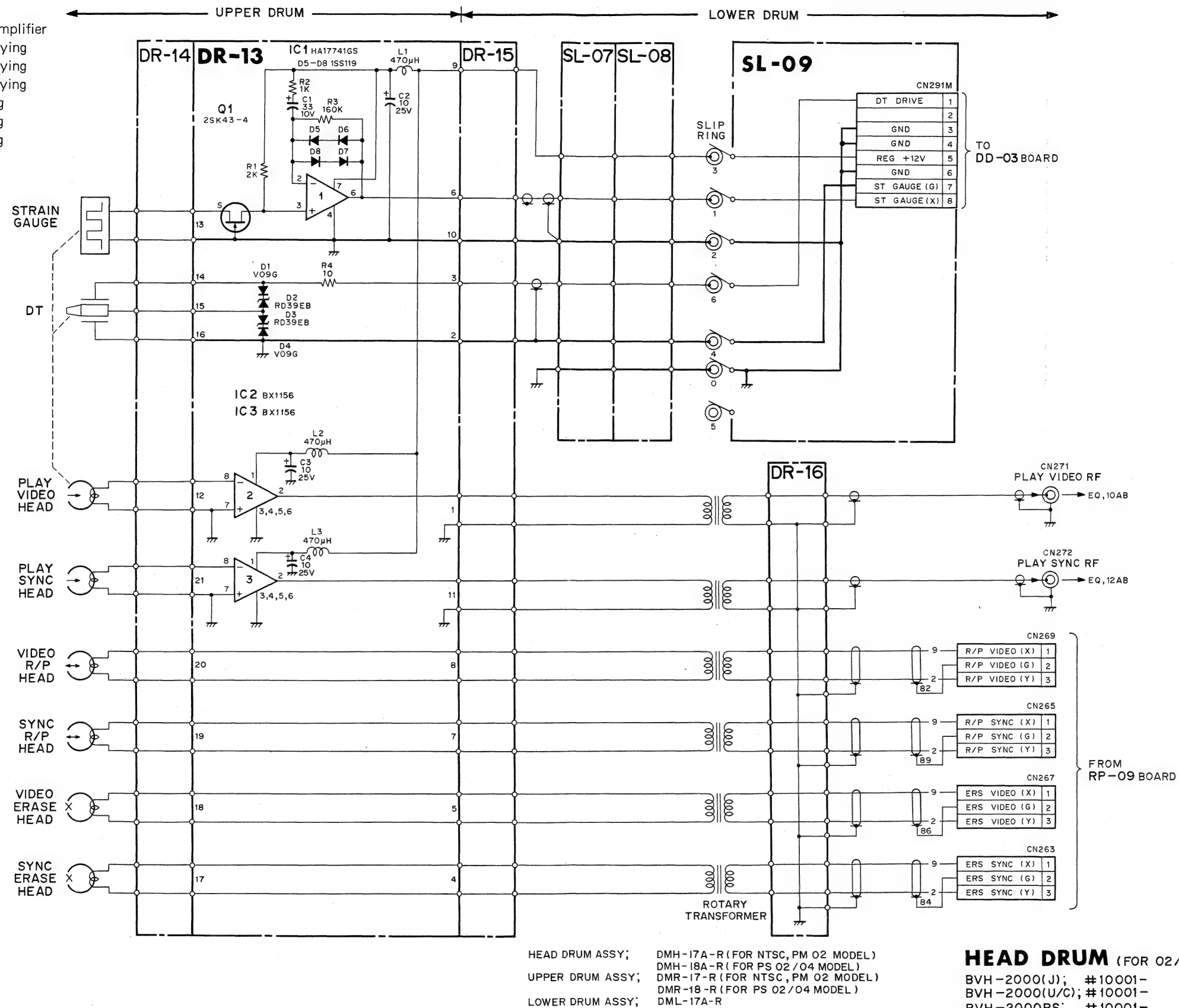
DR-15 BOARD (1-606-665-13)

Solder Side



HEAD DRUM ; FOR 02/04 MODEL

DR-13 BOARD: Video/Sync PB Amplifier
 DR-14 BOARD: Rotary Head Relaying
 DR-15 BOARD: Rotary Head Relaying
 DR-16 BOARD: Rotary Head Relaying
 SL-07 BOARD: Slip Ring Relaying
 SL-08 BOARD: Slip Ring Relaying
 SL-09 BOARD: Slip Ring Relaying

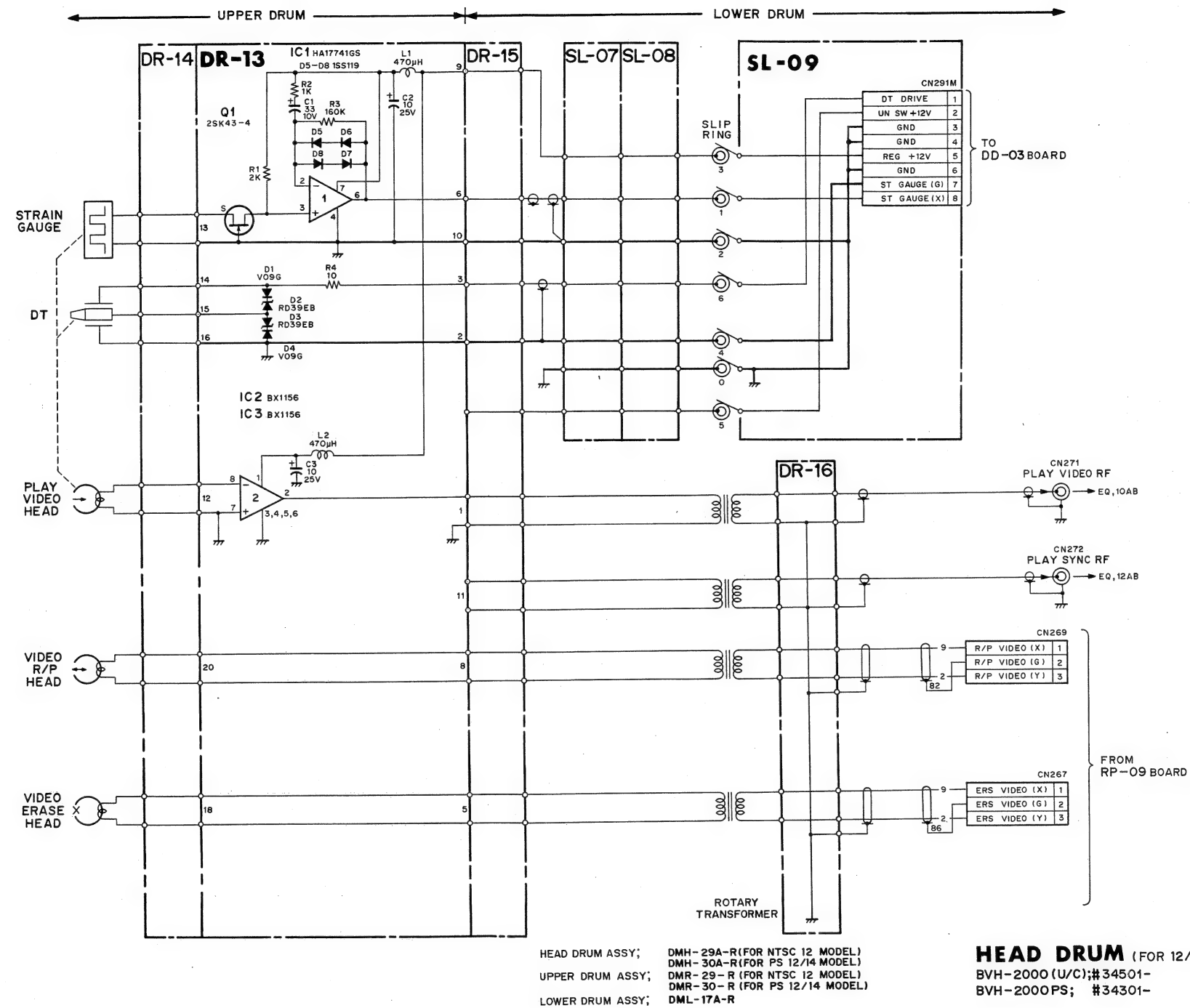


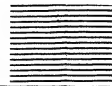
HEAD DRUM (FOR 02/04)

BVH-2000(J); #10001- BVH-2180(J); #10001-
 BVH-2000(U/C); #10001- BVH-2180(U/C); #10001-
 BVH-2000PS; #10001- BVH-2180PS; #10001-
 BVH-2000PM; #10001- BVH-2180PM; #10001-

HEAD DRUM; FOR 12/14 MODEL

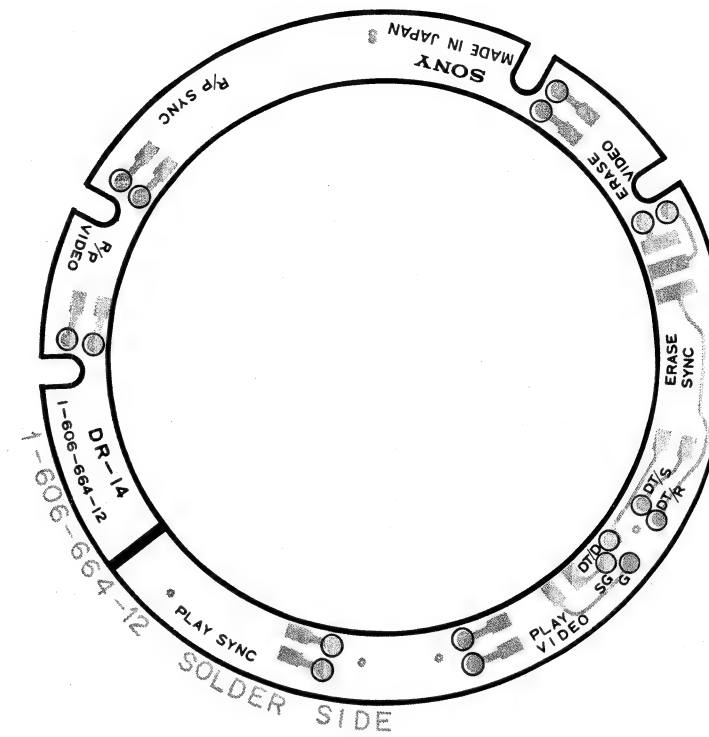
DR-13 BOARD: Video/Sync PB Amplifier
 DR-14 BOARD: Rotary Head Relaying
 DR-15 BOARD: Rotary Head Relaying
 DR-16 BOARD: Rotary Head Relaying
 SL-07 BOARD: Slip Ring Relaying
 SL-08 BOARD: Slip Ring Relaying
 SL-09 BOARD: Slip Ring Relaying





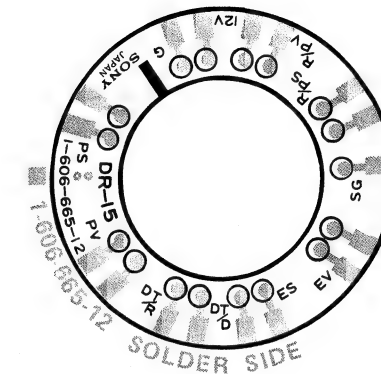
DR-14 BOARD (1-606-664-12)

Solder Side



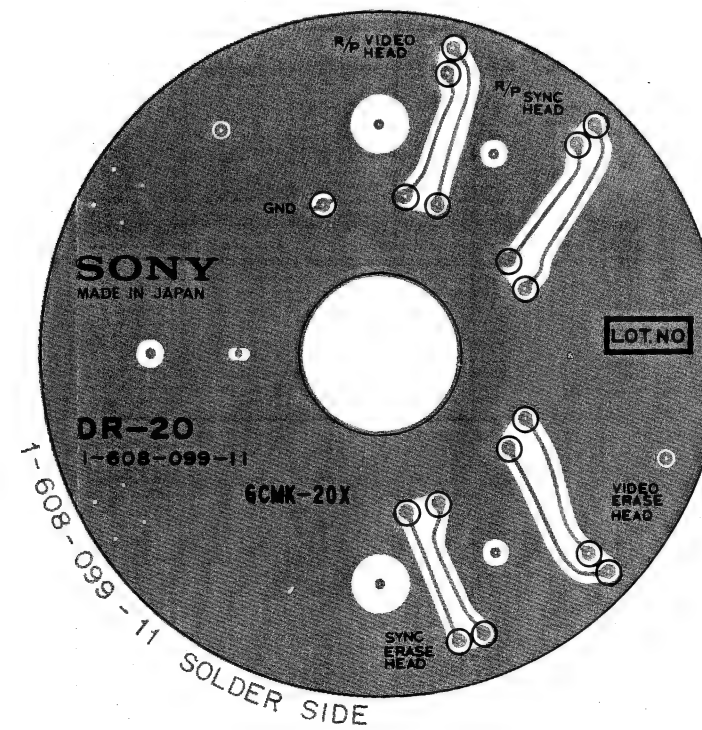
DR-15 BOARD (1-606-665-12)

Solder Side



DR-20 BOARD (1-608-099-11)

Component Side

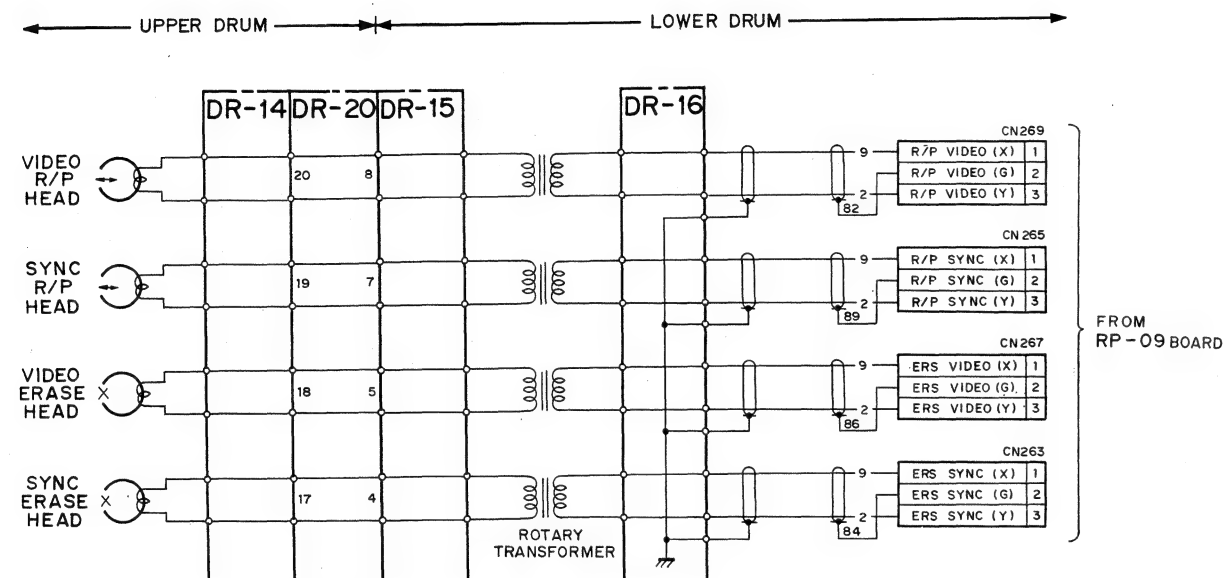


HEAD DRUM; FOR 00 MODEL

DR-14 BOARD: Rotary Head Relaying

DR-15 BOARD: Rotary Head Relaying

DR-20 BOARD: Rotary Head Relaying



HEAD DRUM ASSY; DMH-19A-R (FOR NTSC, PM 00 MODEL)
 DMH-20A-R (FOR PS, 00 MODEL)
 UPPER DRUM ASSY; DMR-19-R (FOR NTSC, PM 00 MODEL)
 DMR-20-R (FOR PS 00 MODEL)
 LOWER DRUM ASSY; DML-19A-R

HEAD DRUM (FOR 00 MODEL)

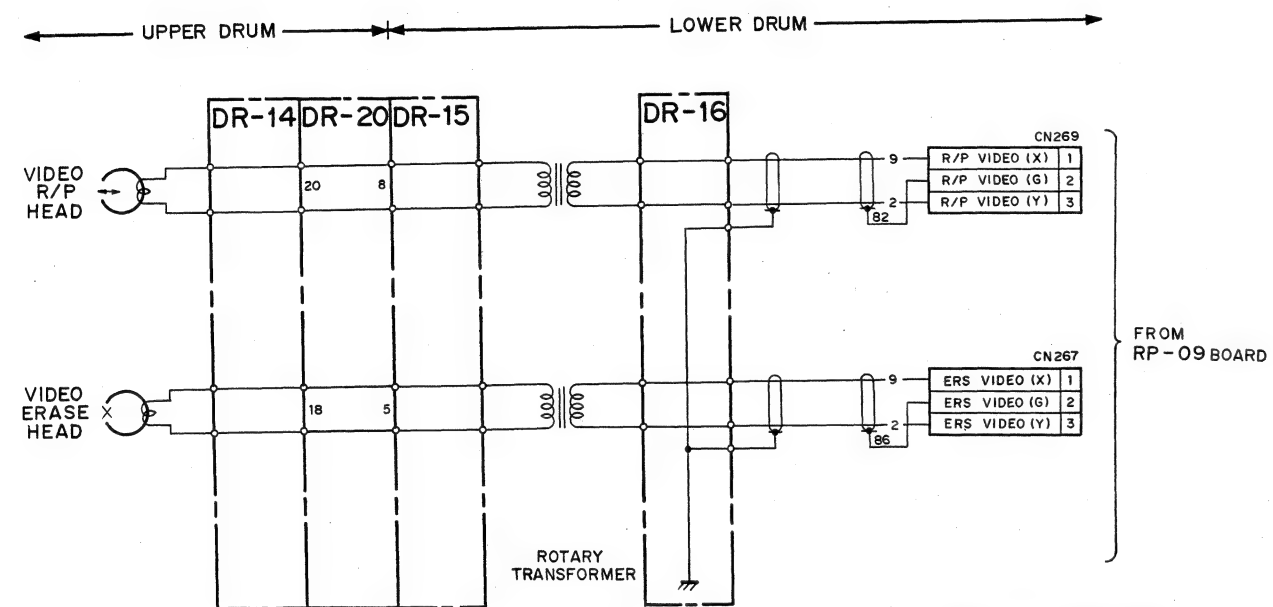
BVH-2000(J); #10001-
 BVH-2000(U/C); #10001-
 BVH-2000PS; #10001-

HEAD DRUM; FOR 10 MODEL

DR-14 BOARD: Rotary Head Relaying

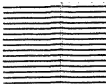
DR-15 BOARD: Rotary Head Relaying

DR-20 BOARD: Rotary Head Relaying

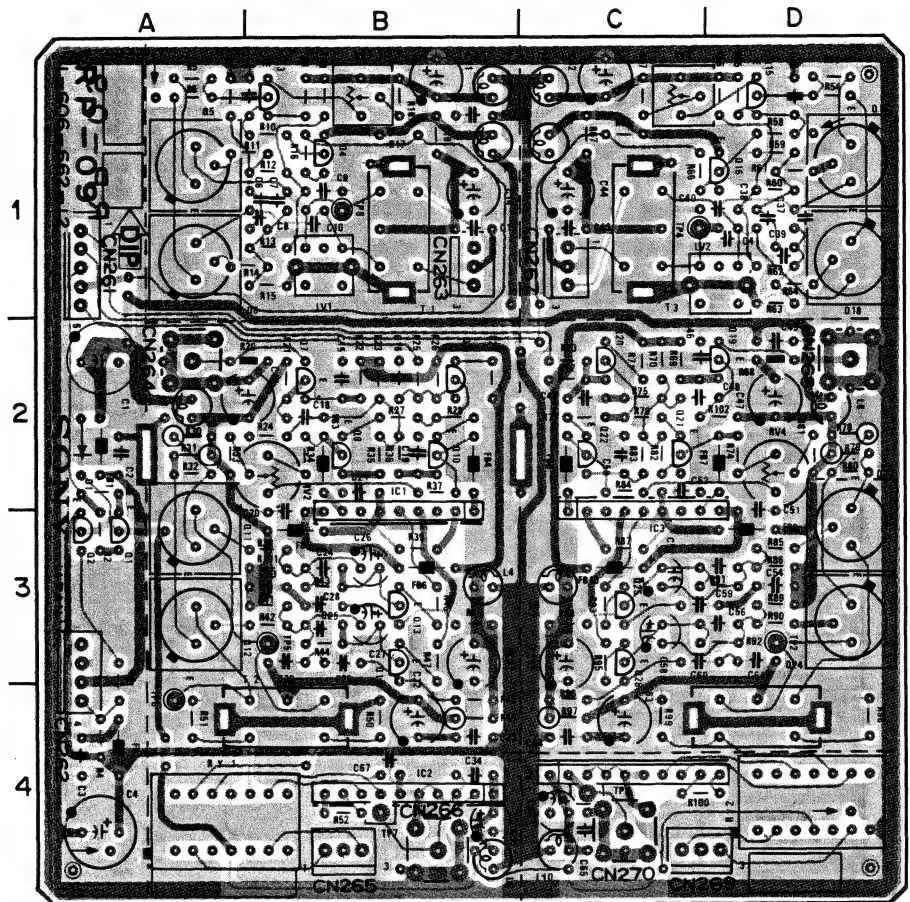


HEAD DRUM ASSY; DMH-31A-R (FOR NTSC 10 MODEL)
 DMH-32A-R (FOR PS 10 MODEL)
 UPPER DRUM ASSY; DMR-31-R (FOR NTSC 10 MODEL)
 DMR-32-R (FOR PS 10 MODEL)
 LOWER DRUM ASSY; DML-19A-R

HEAD DRUM (FOR 10 MODEL)
 BVH-2000(U/C); #34501-
 BVH-2000PS; #34301-



RP-09 BOARD (1-606-662-12)
Component Side



1-606-662-12 COMPONENT SIDE

SI-S88-808-1

RP-09 (1-606-662-12 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CN261M	RV1	1B
1A	RV2	2B
CN262M	RV3	1C
3A	RV4	2D
CN263M		
1B	RY1	4A
CN264M	RY2	4D
2A		
CN265M	TP2	3D
4B	TP3	4C
CN266M	TP4	1C
4B	TP5	3B
CN267M	TP6	4A
1C	TP7	4B
CN268M	TP8	1B
2D		
CN269M		
4C		
CN270M		
4C		

D1	2A
D2	2C

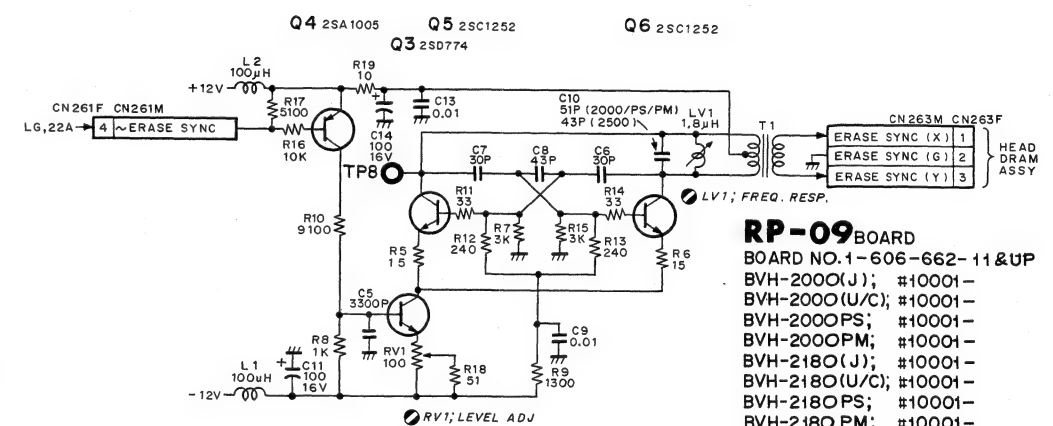
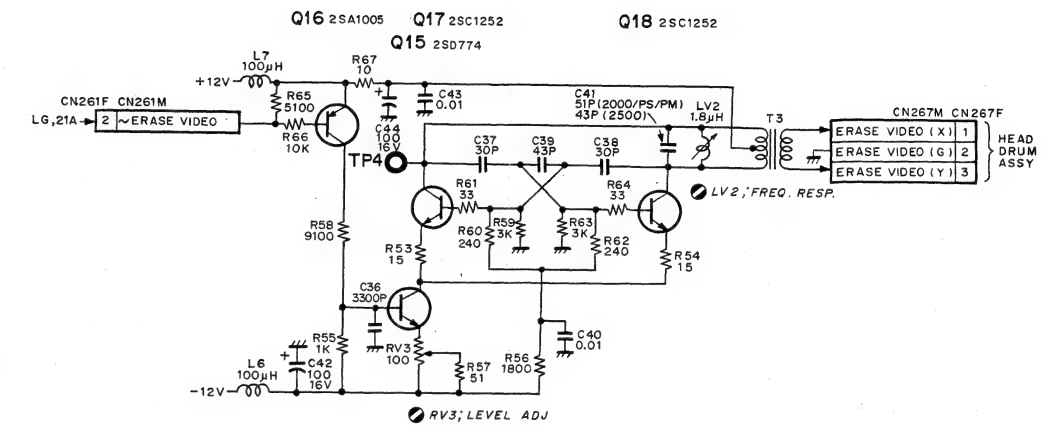
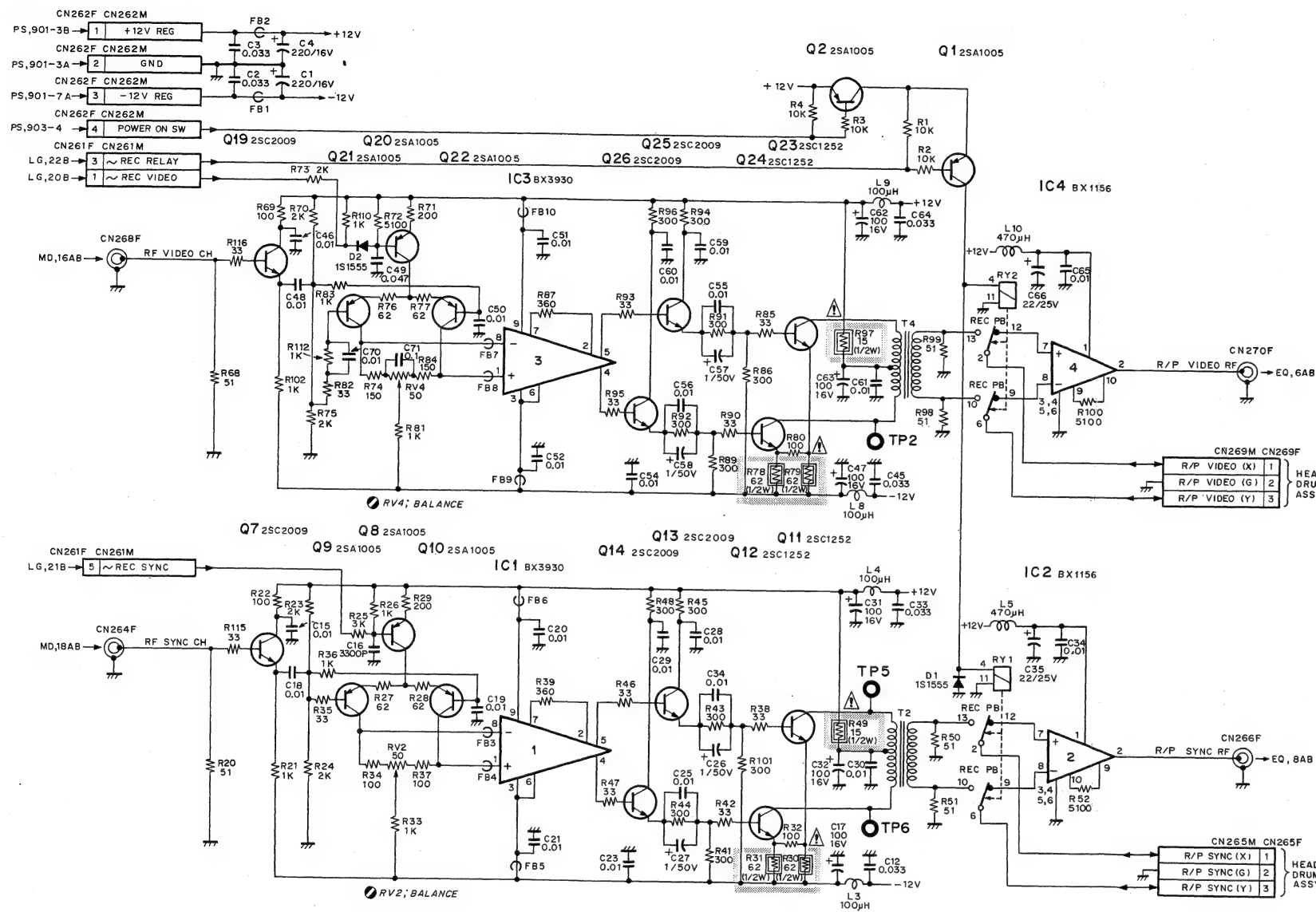
IC1	2B
IC2	4B
IC3	2C
IC4	4C

LV1	1B
LV2	1D

Q1	3A
Q2	3A
Q3	1B
Q4	1B
Q5	1A
Q6	1A
Q7	2B
Q8	2B
Q9	2B
Q10	2B
Q11	3A
Q12	3A
Q13	3B
Q14	3B
Q15	1D
Q16	1D
Q17	1D
Q18	1D
Q19	2D
Q20	2C
Q21	2C
Q22	2C
Q23	3D
Q24	3D
Q25	3C
Q26	3C

RP-09 BOARD

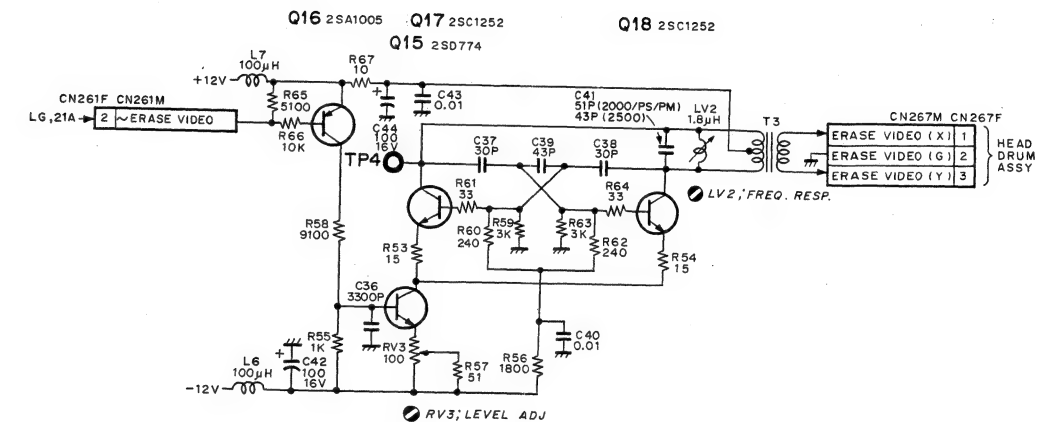
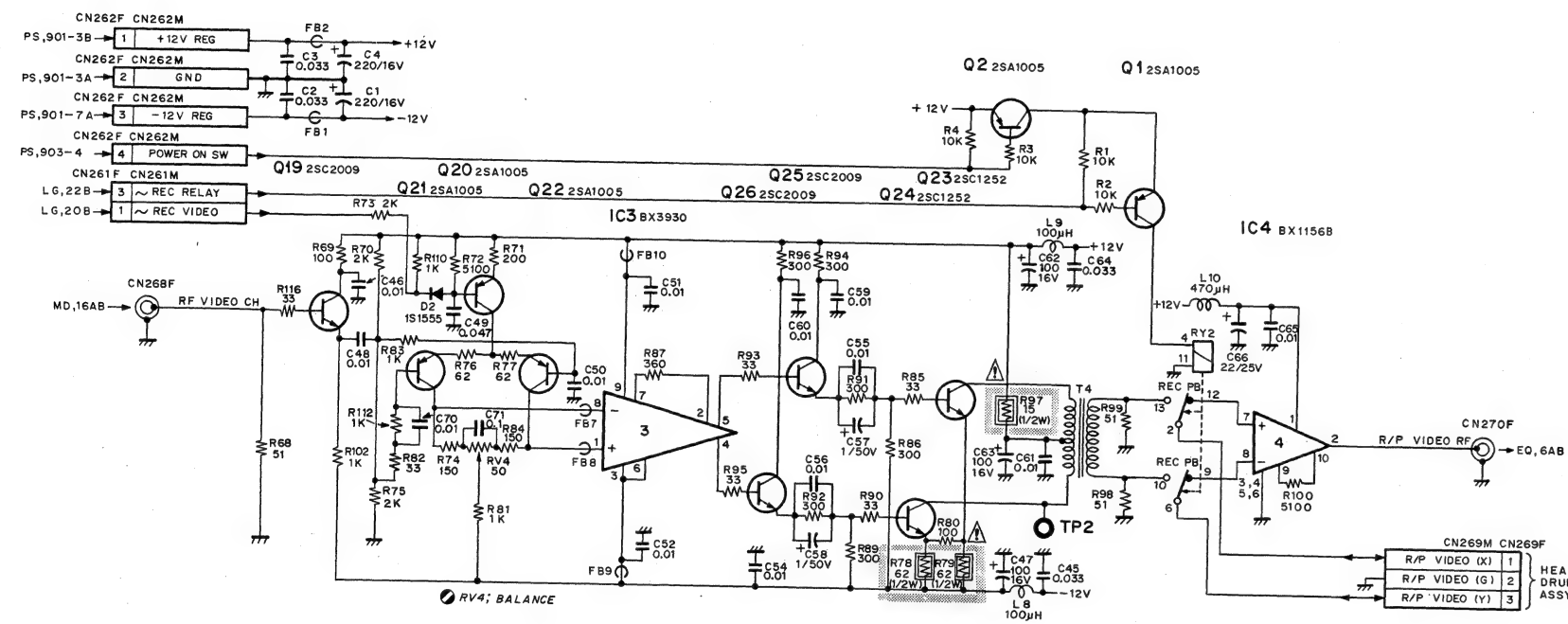
Video/Sync R/P Amplifier (For R/P Head)

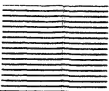


RP-09 BOARD
 BOARD NO.1-606-662-11&UP
 BVH-2000(J); #10001-
 BVH-2000(U/C); #10001-
 BVH-2000PS; #10001-
 BVH-2000PM; #10001-
 BVH-2180(J); #10001-
 BVH-2180(U/C); #10001-
 BVH-2180PS; #10001-
 BVH-2180PM; #10001-
 BVH-2500(J); #10001-
 BVH-2500(U/C); #10001-
 BVH-2500P; #10001-

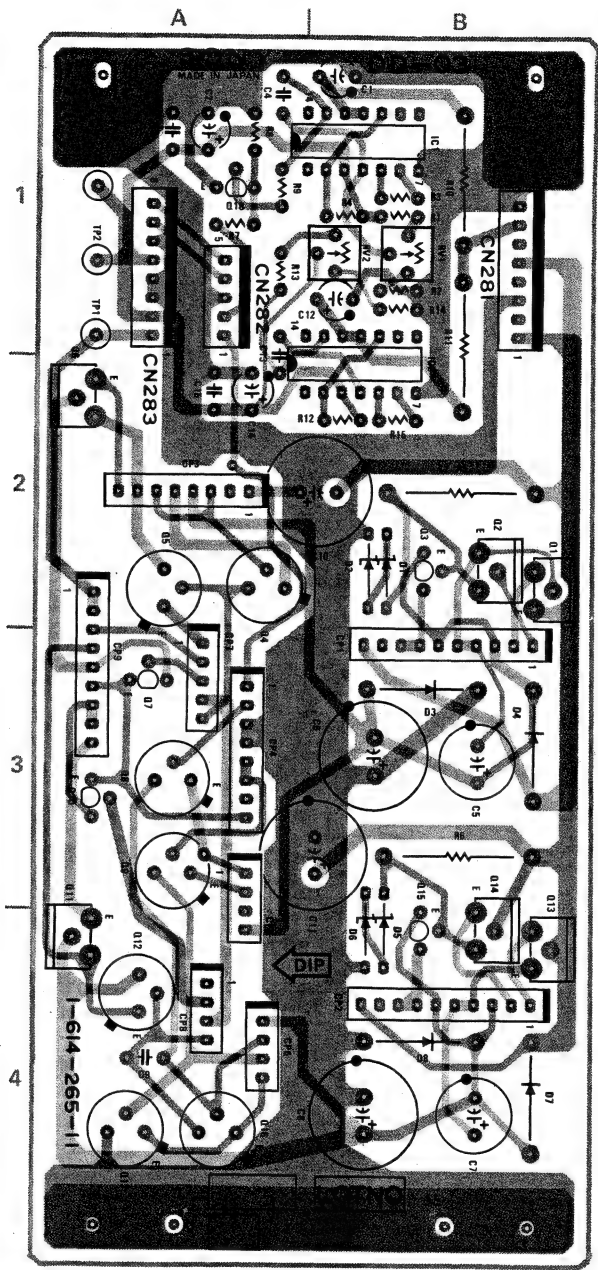
RP-09 BOARD

Video/Sync R/P Amplifier (For R/P Head)





DD-03 BOARD (1-614-265-11)
Component Side



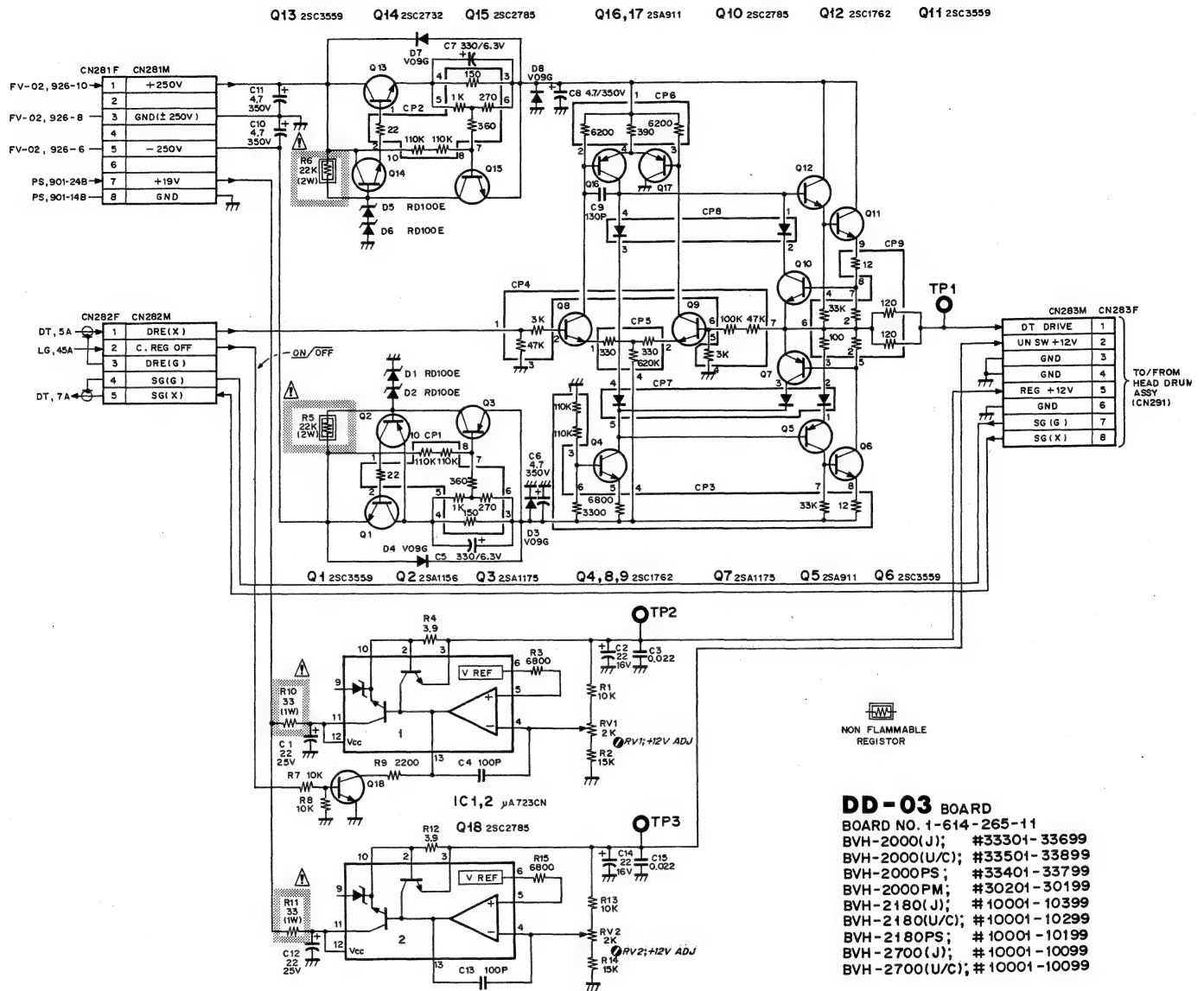
■ 1-614-265-11 COMPONENT SIDE
■ 1-614-265-11 SOLDER SIDE

DD-03 (1-614-265-11)

- BVH-2000
(02/12 MODEL)
- BVH-2000PS
(02/12/04/14 MODEL)
- BVH-2000PM
BVH-2180/PS/PM
- CN281M 1B
CN282M 1A
CN283M 1A
- CP1 3B
CP2 4B
CP3 2A
CP4 3A
CP5 3A
CP6 4A
CP7 3A
CP8 4A
CP9 3A
- D1 2B
D2 2B
D3 3B
D4 3B
D5 4B
D6 4B
D7 4B
D8 4B
- IC1 1B
IC2 2B
- Q1 2B
Q2 2B
Q3 2B
Q4 2A
Q5 2A
Q6 2A
Q7 3A
Q8 3A
Q9 3A
Q10 3A
Q11 4A
Q12 4A
Q13 4B
Q14 4B
Q15 4B
Q16 4A
Q17 4A
Q18 2A
- RV1 1A
RV2 1A
- TP1 1A
TP2 1A
TP3 1A

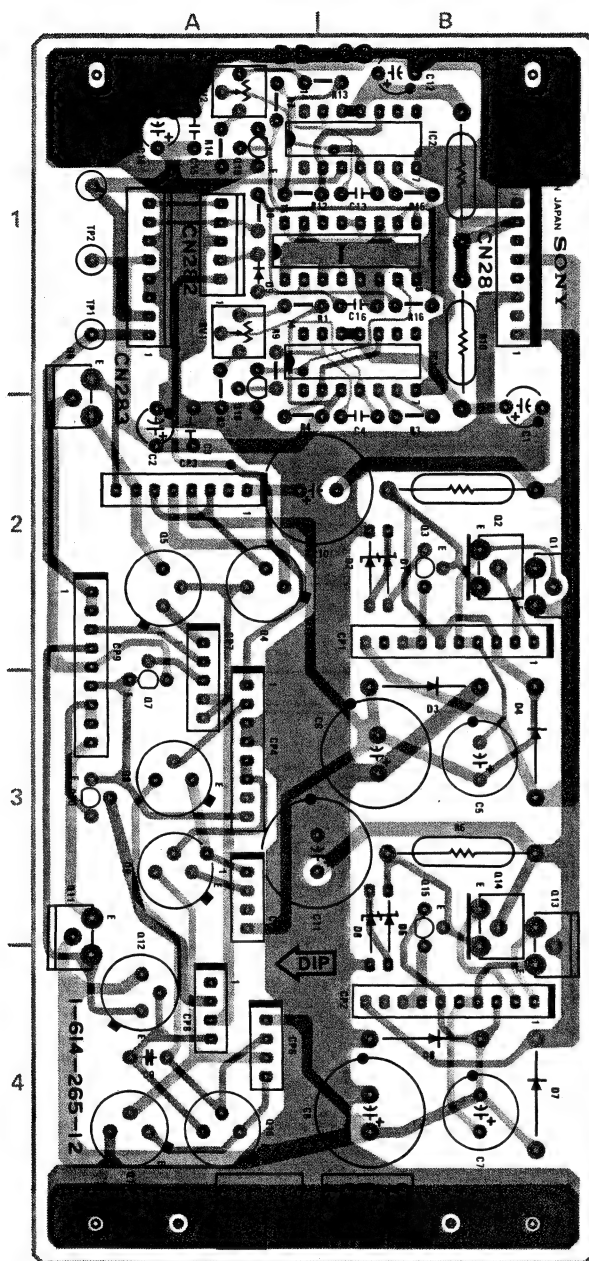
DD-03 BOARD

DT Drive



DD-03 BOARD (1-614-265-12)

Component Side



■ 1-614-265-12 COMPONENT SIDE

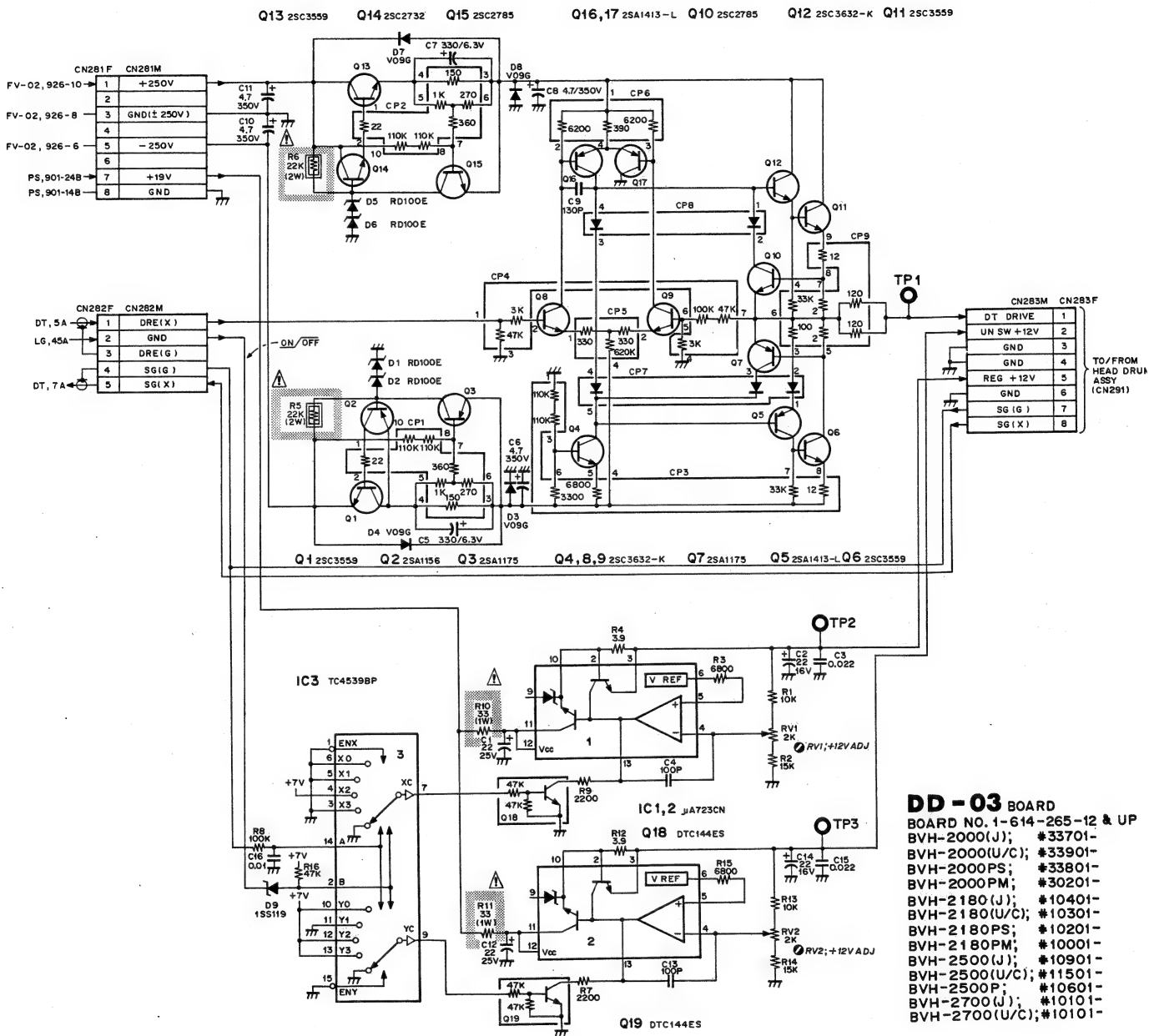
■ 1-614-265-12 SOLDER SIDE

DD-03 (1-614-265-12 & UP)

BVH-2000
(02 MODEL)BVH-2000PS
(02/04 MODEL)BVH-2000PM
BVH-2180/PS/PM
BVH-2500/PCN281M
1B
CN282M
1A
CN283M
1ACP1 3B
CP2 4B
CP3 2A
CP4 3A
CP5 3A
CP6 4A
CP7 3A
CP8 4A
CP9 3AD1 2B
D2 2B
D3 3B
D4 3B
D5 4B
D6 4B
D7 4B
D8 4B
D9 1AIC1 1B
IC2 2B
IC3 3BQ1 2B
Q2 2B
Q3 2B
Q4 2A
Q5 2A
Q6 2A
Q7 3A
Q8 3A
Q9 3A
Q10 3A
Q11 4A
Q12 4A
Q13 4B
Q14 4B
Q15 4B
Q16 4A
Q17 4A
Q18 2A
Q19 1ARV1 1A
RV2 1ATP1 1A
TP2 1A
TP3 1A

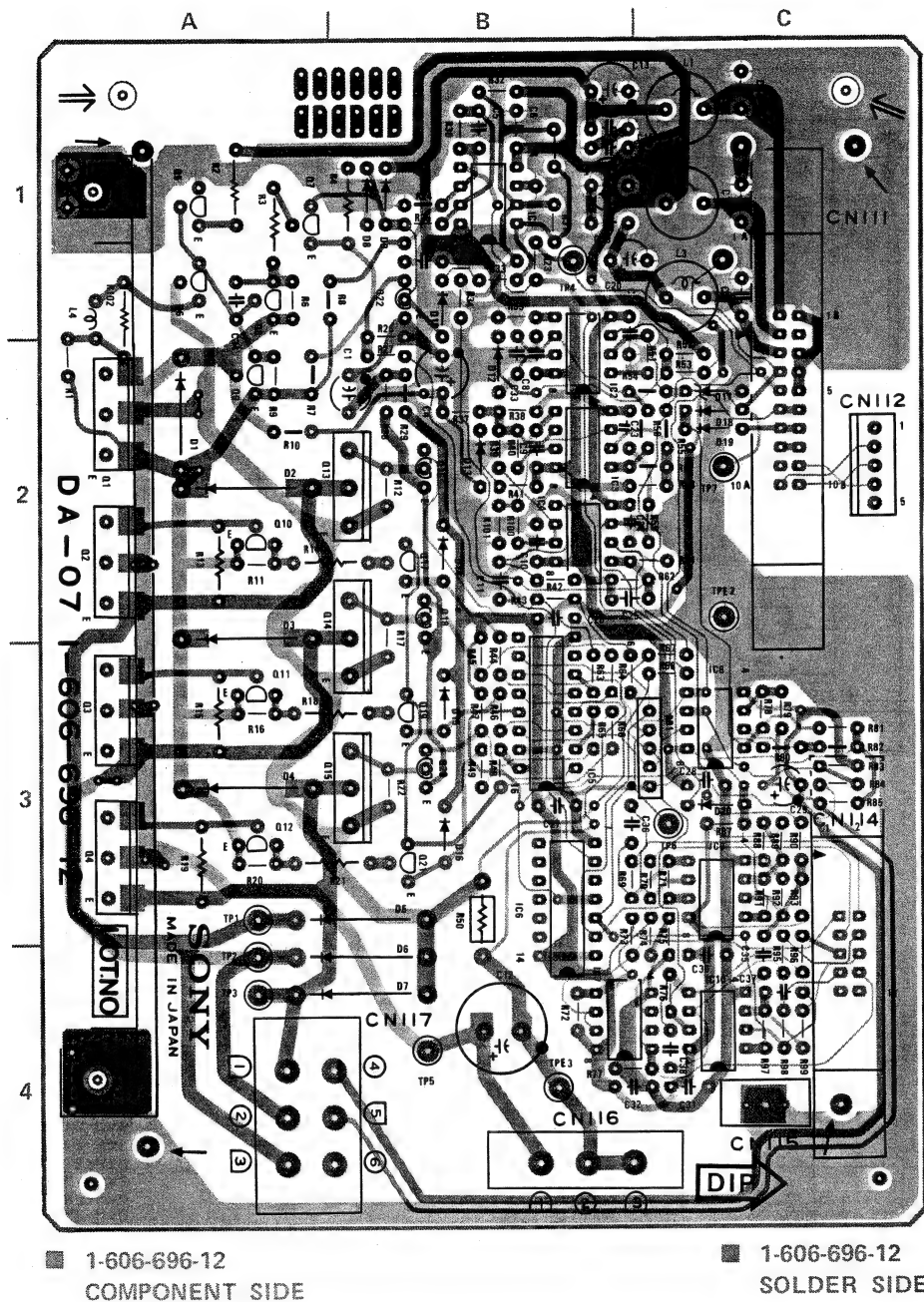
DD-03 BOARD

DT Drive



DA-07 BOARD (1-606-696-12)

Component Side



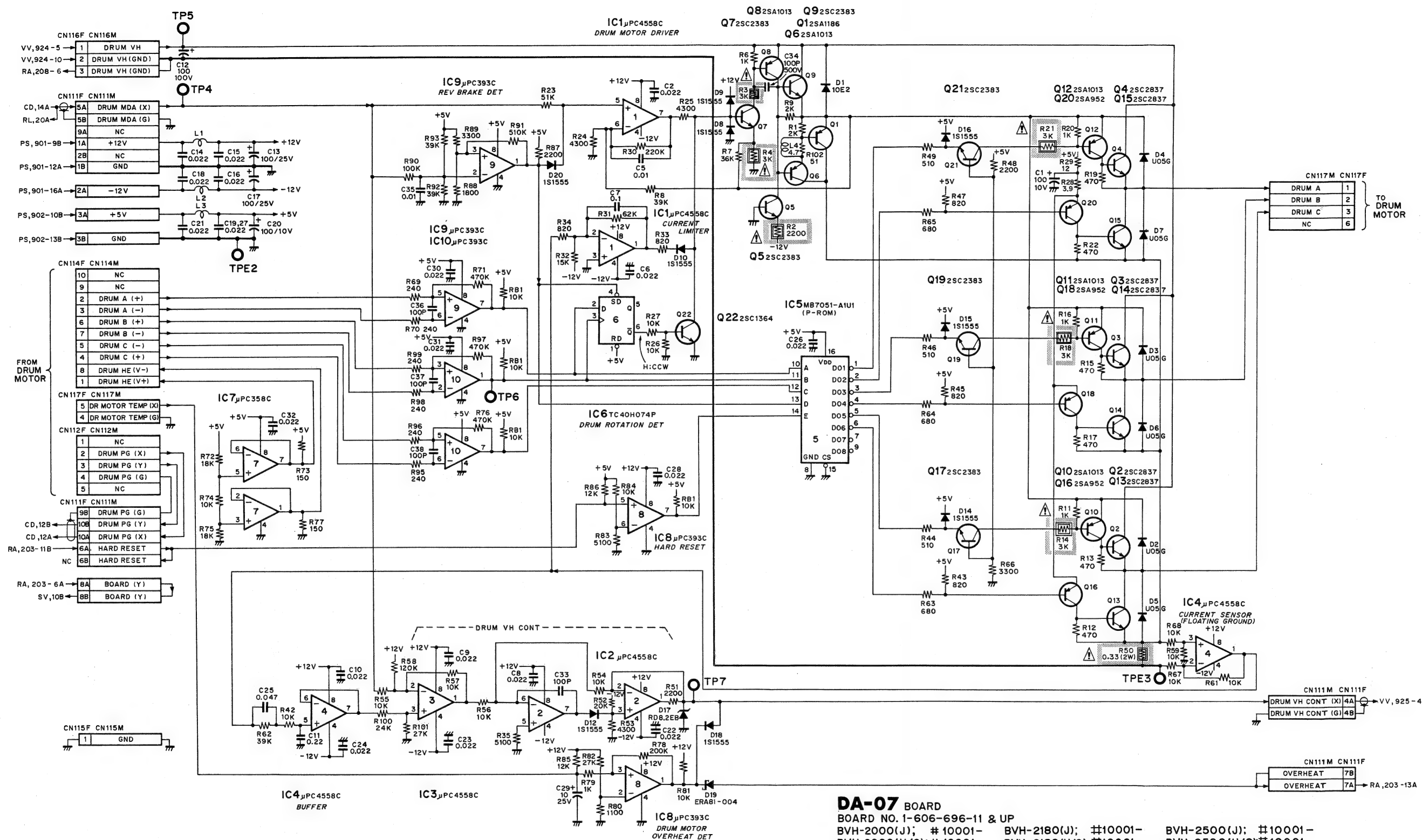
DA-07 (1-606-696-12 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

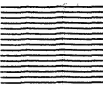
CN111M	TP4	1B
2C	TP5	4B
CN112M	TP6	3C
2C	TP7	2C
CN114M	TPE2	2C
CN115M	TPE3	4B
4C		
CN116M		
4B		
CN117M		
4A		
D1	2A	
D2	2A	
D3	3A	
D4	3A	
D5	3B	
D6	4B	
D7	4B	
D8	1B	
D9	1B	
D10	1B	
D12	2B	
D13	2B	
D14	2B	
D15	3B	
D16	3B	
D17	2C	
D18	2C	
D19	2C	
D20	3C	
IC1	1B	
IC2	2B	
IC3	2B	
IC4	2B	
IC5	3B	
IC6	3B	
IC7	4B	
IC8	3C	
IC9	3C	
IC10	4C	
Q1	2A	
Q2	2A	
Q3	3A	
Q4	3A	
Q5	1A	
Q6	1A	
Q7	1A	
Q8	1A	
Q9	2A	
Q10	2A	
Q11	3A	
Q12	3A	
Q13	2B	
Q14	3B	
Q15	3B	
Q16	2B	
Q17	2B	
Q18	2B	
Q19	3B	
Q20	3B	
Q21	3B	
Q22	1B	
RB1	3C	

DA-07 BOARD
Drum Motor Driver

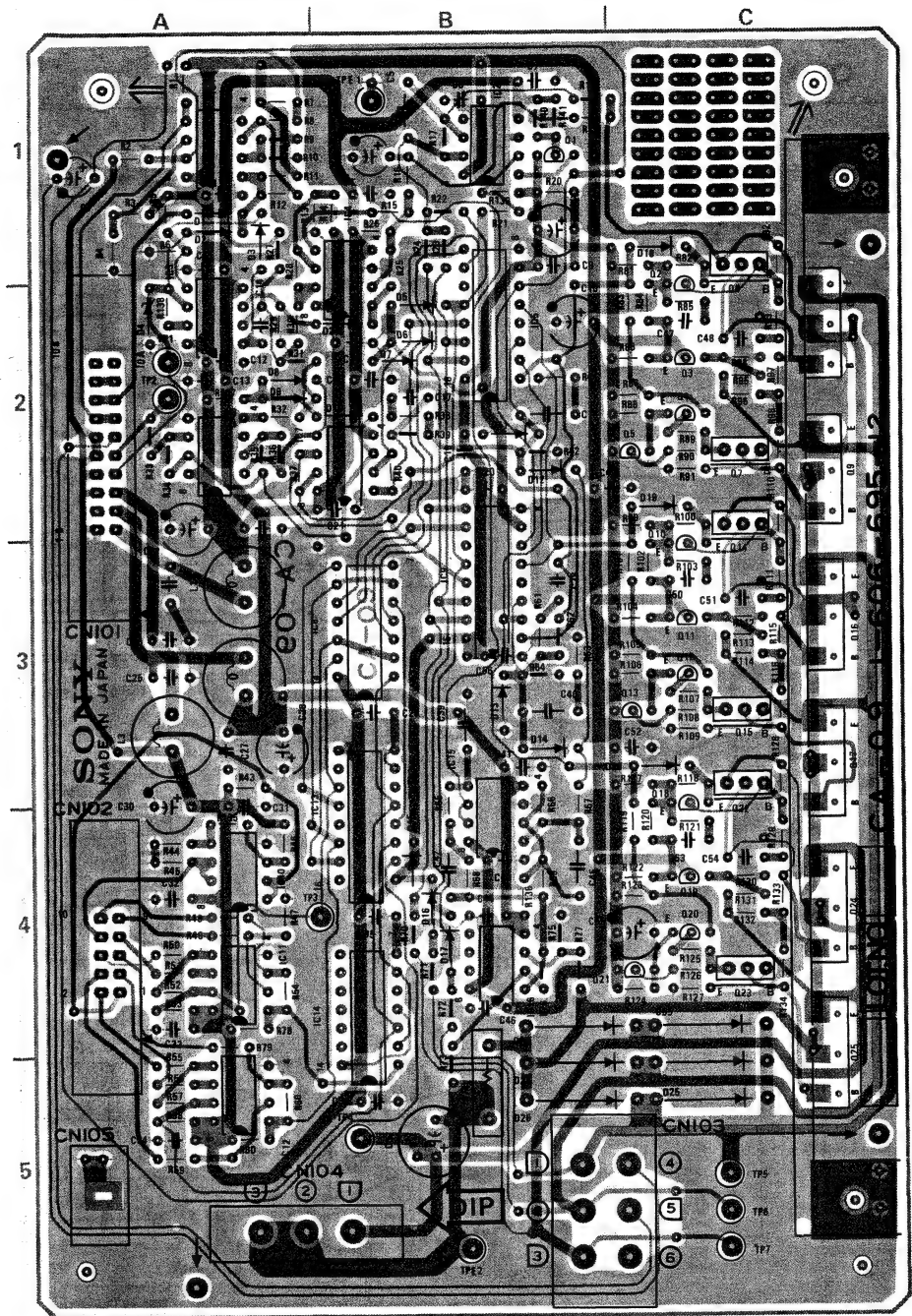
TAPE TRANSPORT DA-07 DA-07 TAPE TRANSPORT



DA-07 BOARD
BOARD NO. 1-606-696-11 & UP
BVH-2000(J); #10001- BVH-2180(J); #10001- BVH-2500(J); #10001-
BVH-2000(U/C); #10001- BVH-2180(U/C); #10001- BVH-2500(U/C); #10001-
BVH-2000PS; #10001- BVH-2180PS; #10001- BVH-2500P; #10001-
BVH-2000PM; #10001- BVH-2180PM; #10001-



CA-09 BOARD (1-606-695-12)
Component Side



■ 1-606-695-12 COMPONENT SIDE
■ 1-606-695-12 SOLDER SIDE

CA-09 (1-606-695-11 & UP)

BVH-2000/PS/PM	TP1	2A
BVH-2180/PS/PM	TP2	2A
BVH-2500/P	TP3	4A
	TP4	5B
CN101M	TP5	5C
2A	TP6	5C
CN102M	TP7	5C
4A		
CN103M	TPE1	1B
5B	TPE2	5B
CN104M		
5A		
CN105M		
5A		

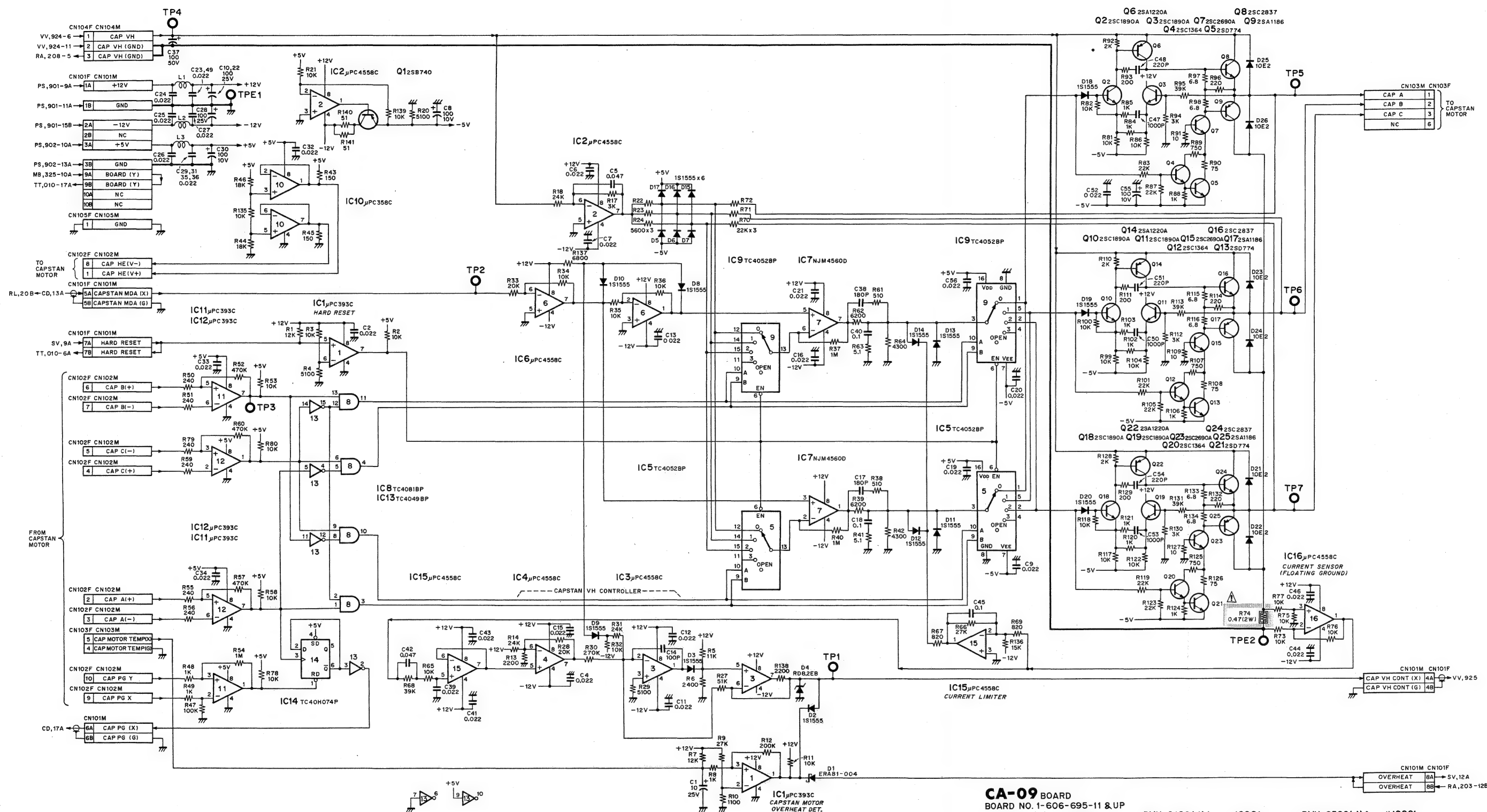
D1	1A
D2	1A
D3	1A
D4	2A
D5	2B
D6	2B
D7	2B
D8	2A
D9	2A
D10	2B
D11	2B
D12	2B
D13	3B
D14	3B
D15	4B
D16	4B
D17	4B
D18	1C
D19	2C
D20	3C
D21	4C
D22	4B
D23	5C
D24	5B
D25	5C
D26	5B

IC1	1A
IC2	1B
IC3	2A
IC4	1B
IC5	2B
IC6	2A
IC7	2A
IC8	3B
IC9	3B
IC10	4A
IC11	4A
IC12	5A
IC13	3B
IC14	4B
IC15	3B
IC16	4B

Q1	1B
Q2	2C
Q3	2C
Q4	2C
Q5	2C
Q6	2C
Q7	2C
Q8	2C
Q9	2C
Q10	3C
Q11	3C
Q12	3C
Q13	3C
Q14	2C
Q15	3C
Q16	3C
Q17	3C
Q18	3C
Q19	4C
Q20	4C
Q21	4C
Q22	3C
Q23	4C
Q24	4C
Q25	4C

CA-09 BOARD

Capstan Motor Driver



CA-09 BOARD

BOARD NO. 1-606-695-11 & UP

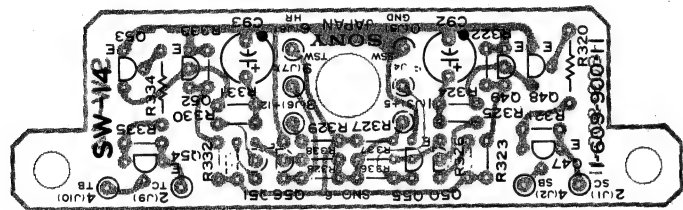
BVH-2000(J); #10001- BVH-2000(U/C); #10001- BVH-2000PS; #10001- BVH-2000PM; #10001- BVH-2180(J); #10001- BVH-2180(U/C); #10001- BVH-2180PS; #10001- BVH-2180PM; #10001- BVH-2500(J); #10001- BVH-2500(U/C); #10001- BVH-2500P; #10001-

RA-05 BOARD (1-606-694-13, 14)

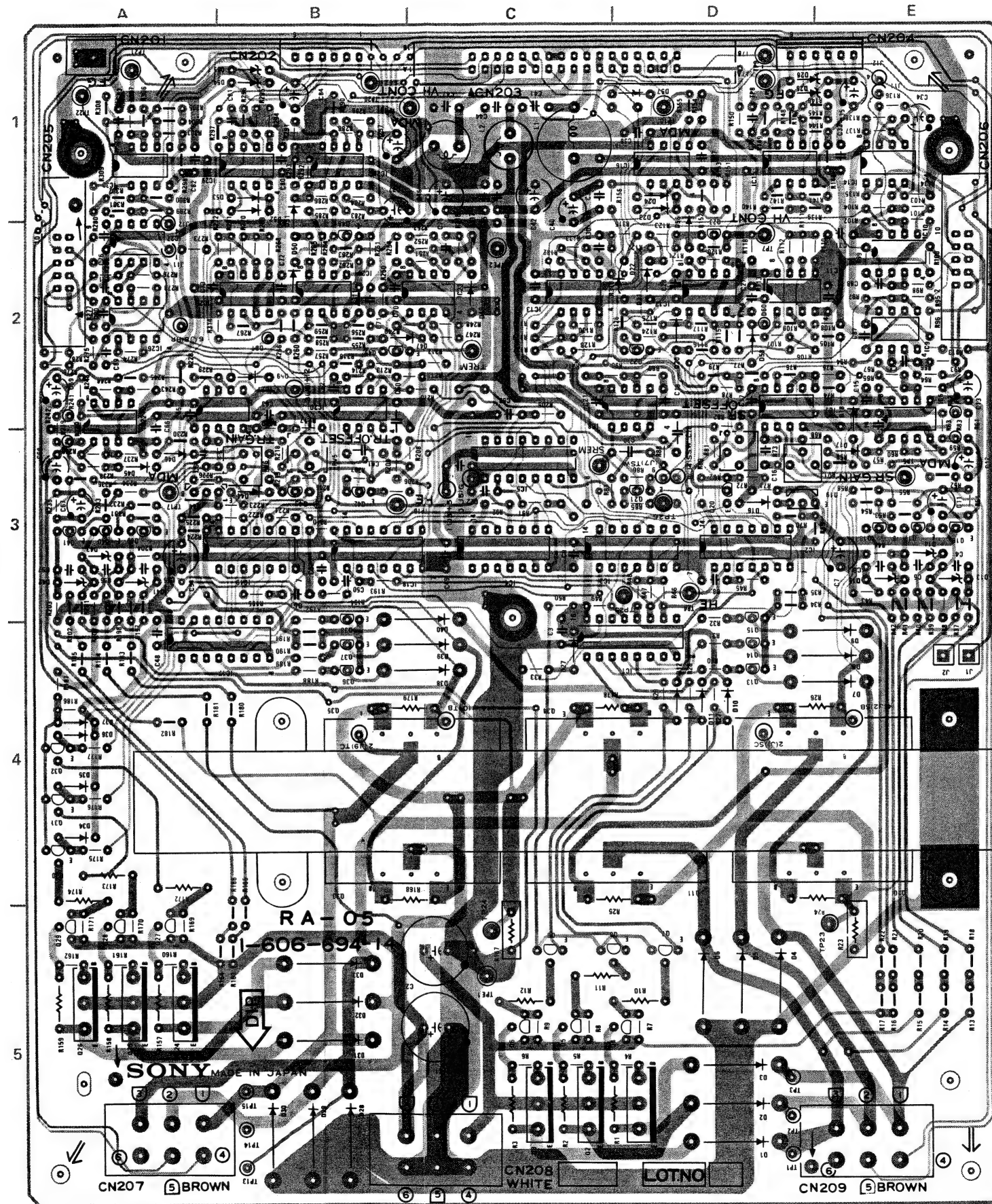
Component Side

SW-14 BOARD (1-609-900-11)

Component Side



1-609-900-11



1-606-694-14 COMPONENT SIDE

1-606-694-14

RA-05 (1-606-694-13 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CN201M	01	50
1A	02	50
CN202M	03	50
1B	04	50
CN203M	05	50
1C	06	50
CN204M	07	50
1E	08	50
CN205M	09	50
2A	10	4E
CN206M	11	4D
2E	12	4E
CN207M	13	4D
3A	14	4D
CN208M	15	3D
5C	16	3E
CN209M	17	3E
5E	18	3E
	19	3D
	20	3D
D1	21	3D
D2	22	3D
D3	23	2D
D4	24	2D
D5	25	2D
D6	26	5A
D7	27	5A
D8	28	5A
D9	29	5A
D10	30	4A
D11	31	4A
D12	32	4A
D13	33	4B
D14	34	4B
D15	35	4B
D16	36	4B
D17	37	4B
D18	38	4B
D19	39	3B
D20	40	3A
D21	41	3A
D22	42	3B
D23	43	3B
D24	44	3A
D25	45	2B
D26	46	2B
D27	47	4D
D28	48	4D
D29	49	4D
D30	50	4D
D31	51	4D
D32	52	4D
D33	53	4D
D34	54	4D
D35	55	4D
D36	56	4D
D37	57	4D
D38	58	4D
D39	59	4D
D40	60	4D
D41	61	3D
D42	62	3D
D43	63	3D
D44	64	3D
D45	65	3D
D46	66	3D
D47	67	3D
D48	68	3D
D49	69	3D
D50	70	3D
D51	71	3D
D52	72	3D
D53	73	3D
D54	74	3D
D55	75	3D
D56	76	3D
D57	77	3D
D58	78	3D
D59	79	3D
D60	80	3D
D61	81	3D
D62	82	3D
D63	83	3D
D64	84	3D
D65	85	3D
D66	86	3D
D67	87	3D
D68	88	3D
D69	89	3D
D70	90	3D
D71	91	3D
D72	92	3D
D73	93	3D
D74	94	3D
D75	95	3D
D76	96	3D
D77	97	3D
D78	98	3D
D79	99	3D
D80	100	3D

(SW-14 BOARD)

D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
D49	77	4D
D50	78	4D
D51	79	4D
D52	80	4D
D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	4D
D58	86	4D
D59	87	4D
D60	88	4D
D61	89	4D
D62	90	4D
D63	91	4D
D64	92	4D
D65	93	4D
D66	94	4D
D67	95	4D
D68	96	4D
D69	97	4D
D70	98	4D
D71	99	4D
D72	100	4D

D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
D49	77	4D
D50	78	4D
D51	79	4D
D52	80	4D
D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	4D
D58	86	4D
D59	87	4D
D60	88	4D
D61	89	4D
D62	90	4D
D63	91	4D
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D65	93	4D
D66	94	4D
D67	95	4D
D68	96	4D
D69	97	4D
D70	98	4D
D71	99	4D
D72	100	4D

D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
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D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	4D
D58	86	4D
D59	87	4D
D60	88	4D
D61	89	4D
D62	90	4D
D63	91	4D
D64	92	4D
D65	93	4D
D66	94	4D
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D68	96	4D
D69	97	4D
D70	98	4D
D71	99	4D
D72	100	4D

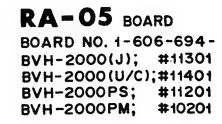
D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
D49	77	4D
D50	78	4D
D51	79	4D
D52	80	4D
D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	4D
D58	86	4D
D59	87	4D
D60	88	4D
D61	89	4D
D62	90	4D
D63	91	4D
D64	92	4D
D65	93	4D
D66	94	4D
D67	95	4D
D68	96	4D
D69	97	4D
D70	98	4D
D71	99	4D
D72	100	4D

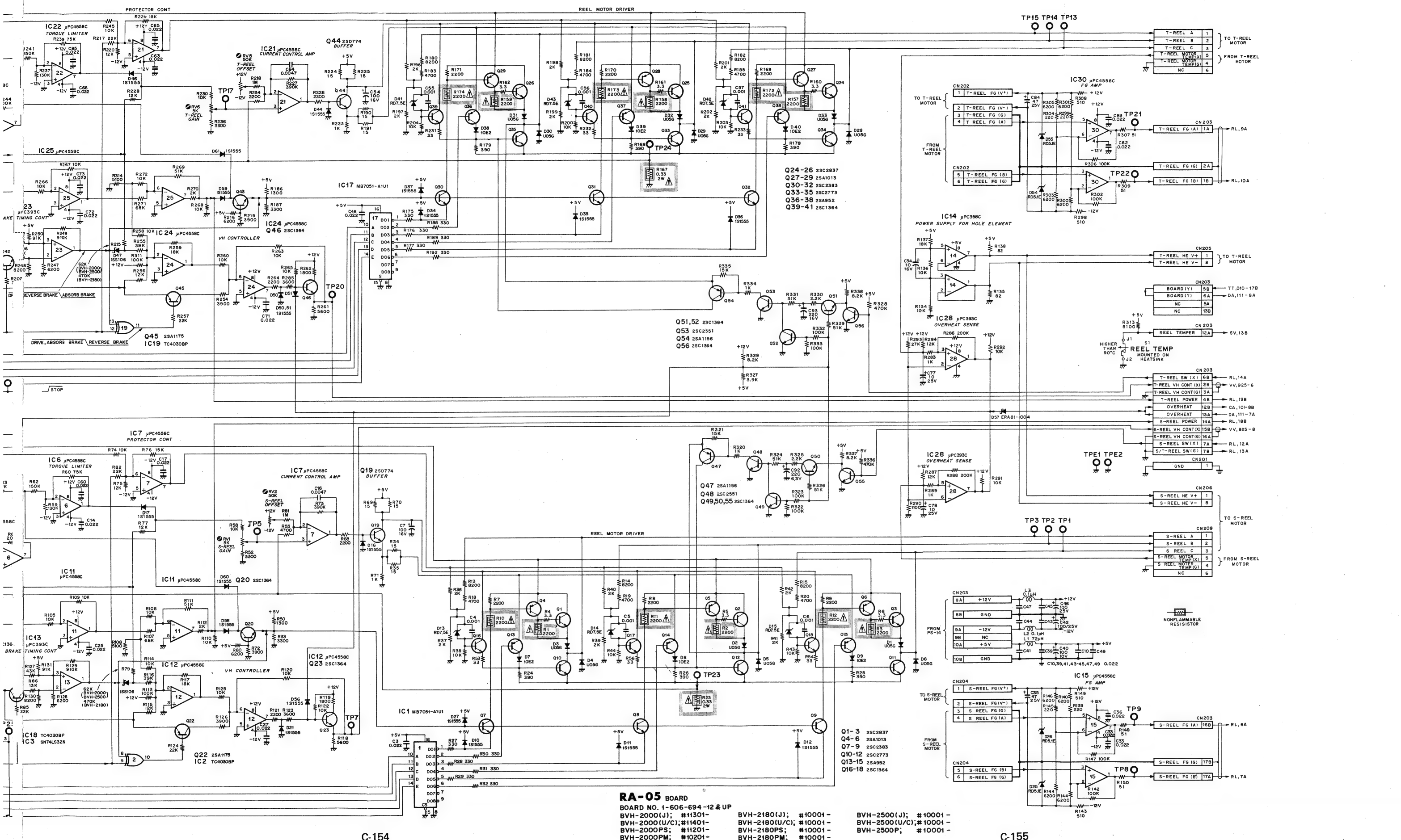
D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
D49	77	4D
D50	78	4D
D51	79	4D
D52	80	4D
D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	4D
D58	86	4D
D59	87	4D
D60	88	4D
D61	89	4D
D62	90	4D
D63	91	4D
D64	92	4D
D65	93	4D
D66	94	4D
D67	95	4D
D68	96	4D
D69	97	4D
D70	98	4D
D71	99	4D
D72	100	4D

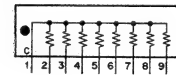
D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
D49	77	4D
D50	78	4D
D51	79	4D
D52	80	4D
D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	4D
D58	86	4D
D59	87	4D
D60	88	4D
D61	89	4D
D62	90	4D
D63	91	4D
D64	92	4D
D65	93	4D
D66	94	4D
D67	95	4D
D68	96	4D
D69	97	4D
D70	98	4D
D71	99	4D
D72	100	4D

D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
D49	77	4D
D50	78	4D
D51	79	4D
D52	80	4D
D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	4D
D58	86	4D
D59	87	4D
D60	88	4D
D61	89	4D
D62	90	4D
D63	91	4D
D64	92	4D
D65	93	4D
D66	94	4D
D67	95	4D
D68	96	4D
D69	97	4D
D70	98	4D
D71	99	4D
D72	100	4D

D30	58	4D
D31	59	4D
D32	60	4D
D33	61	4D
D34	62	4D
D35	63	4D
D36	64	4D
D37	65	4D
D38	66	4D
D39	67	4D
D40	68	4D
D41	69	4D
D42	70	4D
D43	71	4D
D44	72	4D
D45	73	4D
D46	74	4D
D47	75	4D
D48	76	4D
D49	77	4D
D50	78	4D
D51	79	4D
D52	80	4D
D53	81	4D
D54	82	4D
D55	83	4D
D56	84	4D
D57	85	





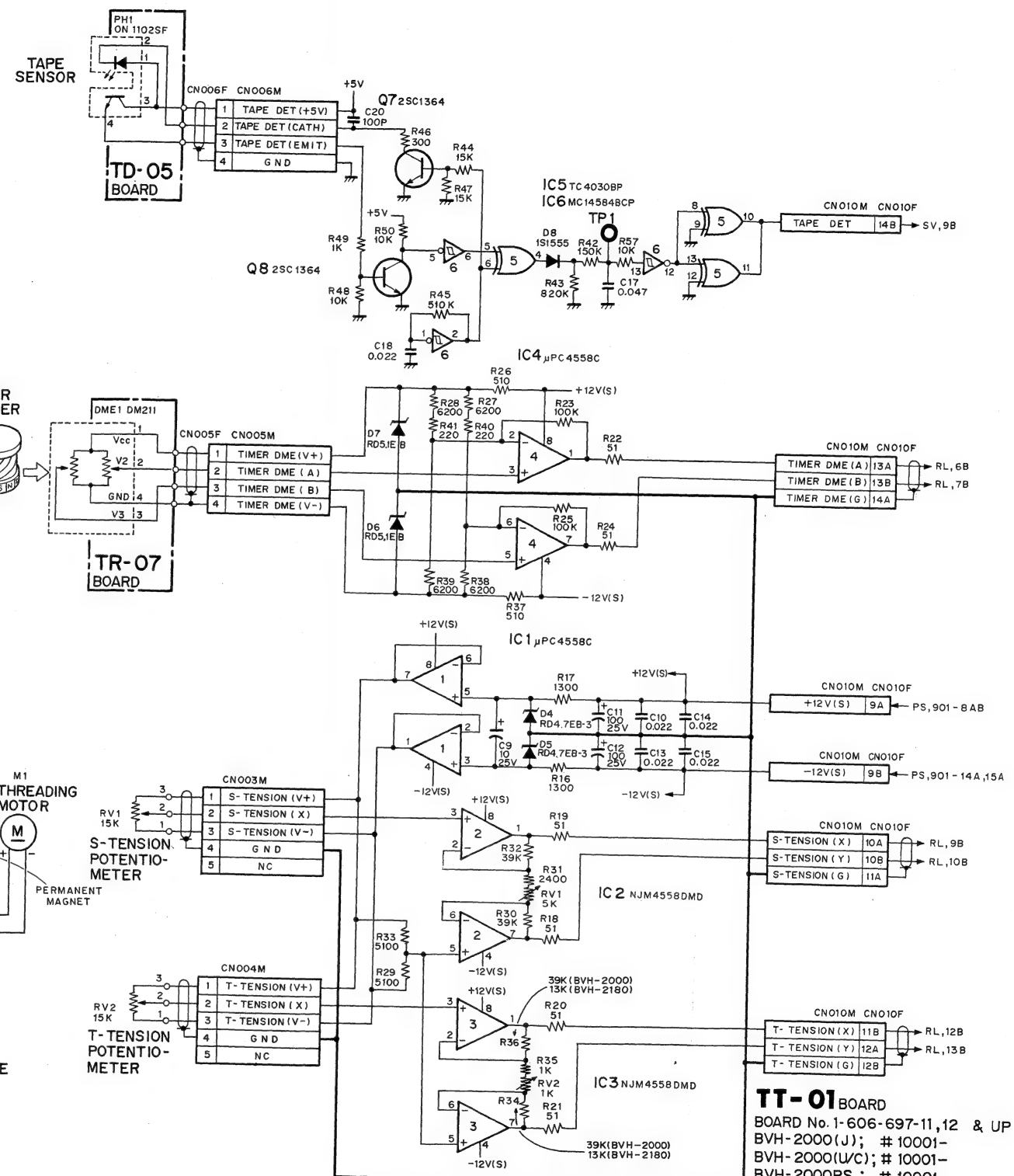
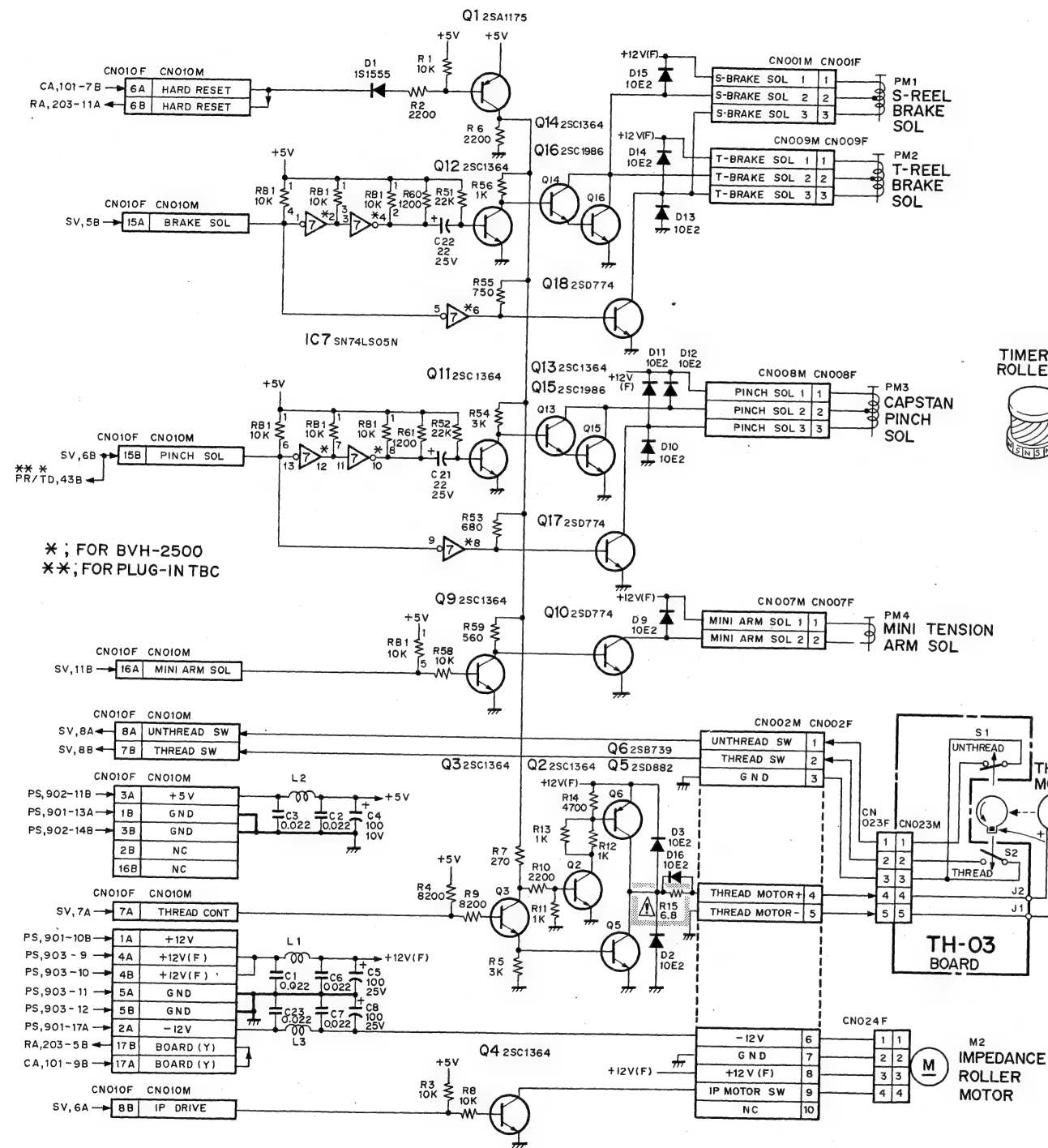


TT-01 (1-606-697-12 & UP)			
BVH-2000/PS/PM		IC1	2B
BVH-2180/PS/PM		IC2	18
BVH-2500/P		IC3	2B
		IC4	2C
CN001M		IC5	1C
2A		IC6	2C
CN002M		IC7	1D
2A			
CN003M		01	1A
2B		02	1A
CN004M		03	2A
2C		04	2A
CN005M		05	2A
2C		06	2A
CN006M		07	2C
2C		08	2C
CN007M		09	1D
2C		010	2D
CN008M		011	1D
2D		012	1D
CN009M		013	1D
2D		014	1D
CN010M		015	2D
2B		016	2D
		017	2D
D1	1A	018	2D
D2	2A		
D3	2A	RB1	1D
D4	1B		
D5	1B	RV1	2B
D6	2C	RV2	2B
D7	2C		
D8	1C	TP1	1D
D9	2D		
D10 ¹	2D	TPE2	2A
D11	2D		
D12	2D		
D13	2D		
D14	2D		
D15	2D		
D16	2A		

TT-01 BOARD

TTP AUX (Solenoid, Motor Driver etc.)

RS-1

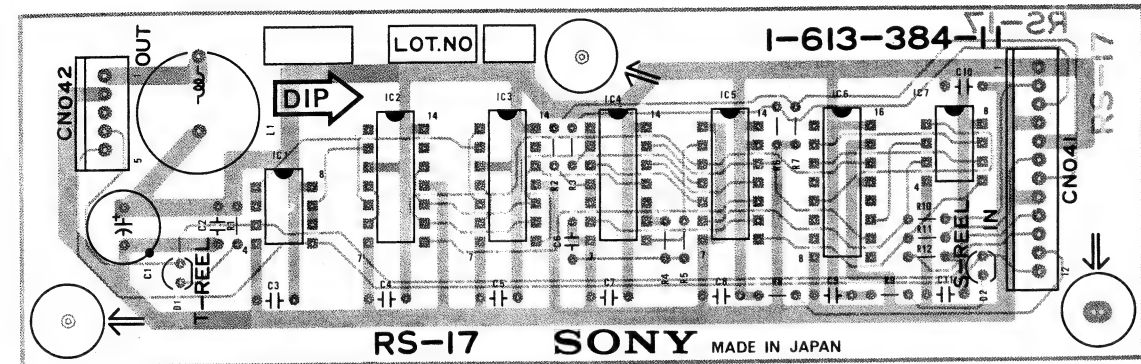


TT-01 BOARD
BOARD No. 1-606-697-11, 12 & UP
BVH-2000(J); # 10001-
BVH-2000(WC); # 10001-
BVH-2000PS; # 10001-
BVH-2000PM; # 10001-
BVH-2180(J); # 10001-
BVH-2180(WC); # 10001-
BVH-2180PS; # 10001-
BVH-2180PM; # 10001-

S.

RS-17 BOARD (1-613-384-11)

Component Side

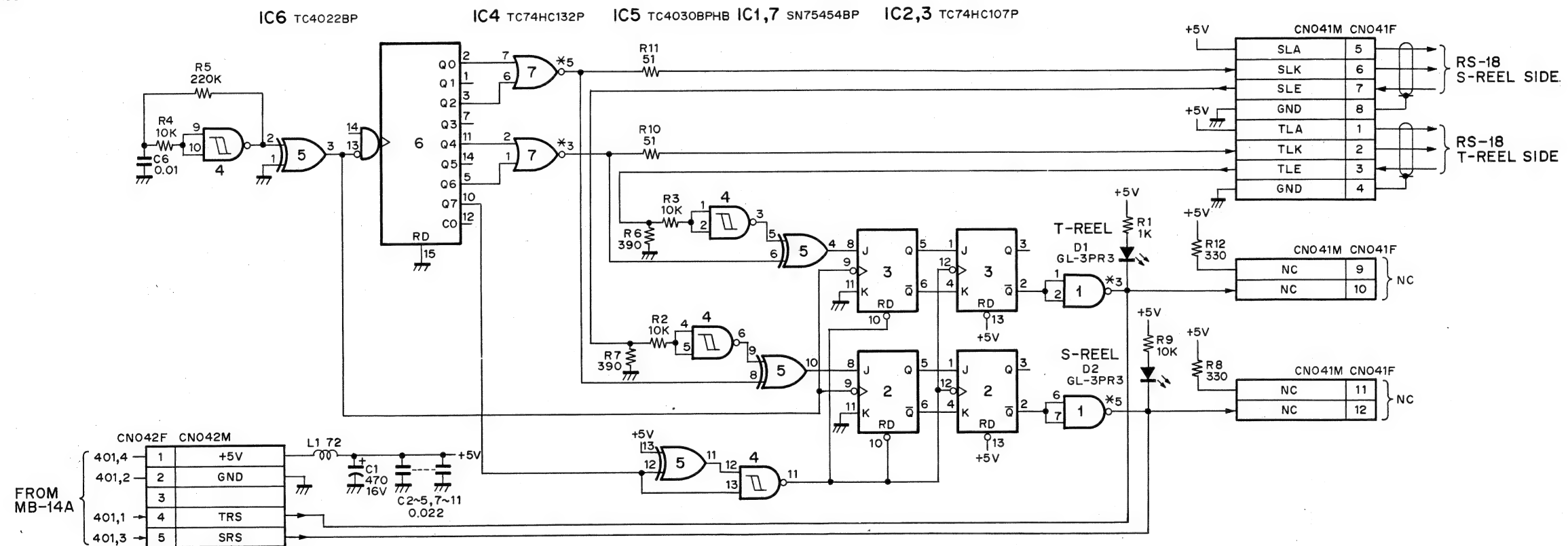


■ 1-613-384-11 COMPONENT SIDE

■ 1-613-384-11 SOLDER SIDE

RS-17 BOARD

Reel Size Sensor

**RS-17 BOARD**

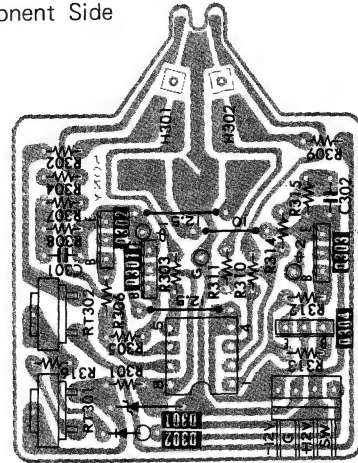
BOARD NO. 1-613-384-11 & UP
 BVH-2180(J); #10001-
 BVH-2180(U/C); #10001-
 BVH-2180PS; #10001-
 BVH-2180PM; #10001-

RS-18 BOARD (1-613-389-11)

Solder Side
(FOR BVH-2180)1-613-389-11
SOLDER SIDE

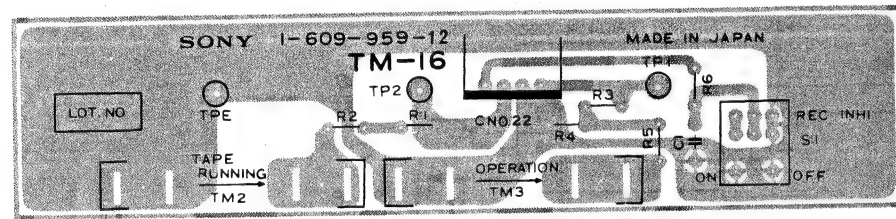
MOTOR BOARD (1-602-615-11)

Component Side

1-602-615-11
SOLDER SIDE

TM-16 BOARD (1-609-959-12)

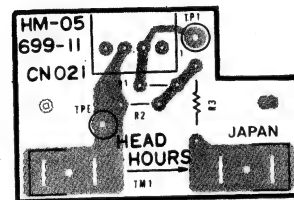
Component Side



1-609-959-12 SOLDER SIDE

HM-05 BOARD (1-606-699-11)

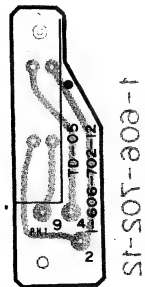
Component Side



1-606-699-11 SOLDER SIDE

TD-05 BOARD (1-606-702-12)

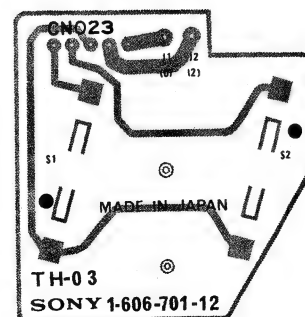
Component Side



1-606-702-12 SOLDER SIDE

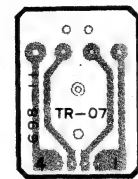
TH-03 BOARD (1-606-701-12)

Solder Side

1-606-701-12
SOLDER SIDE

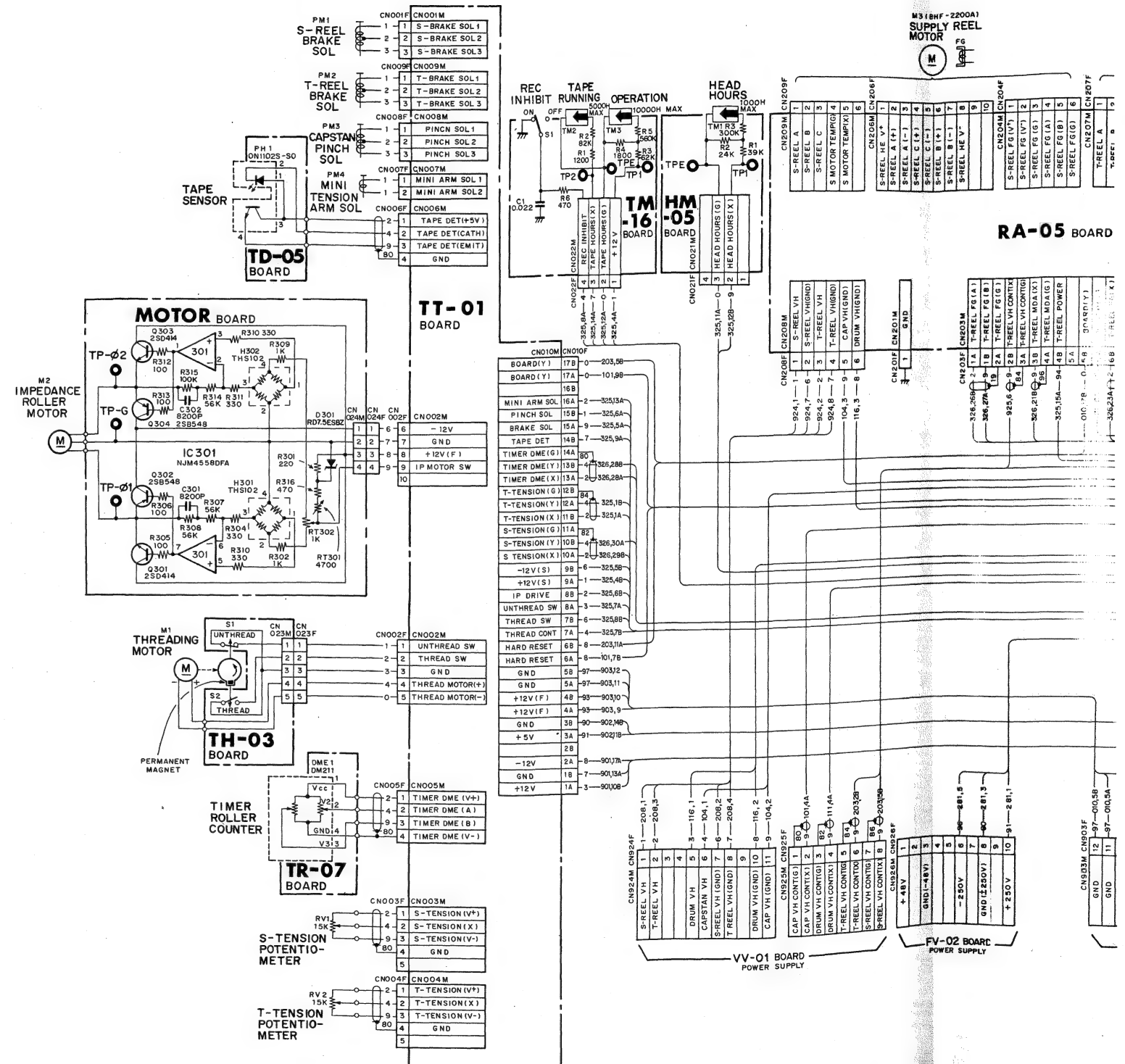
TR-07 BOARD (1-606-698-11)

Solder Side

1-606-698-11
SOLDER SIDE

FRAME WIRING (1/2); TAPE TRANSPORT; FOR 02/04 MODEL

HM-05 BOARD: Head Hours Meter
 TM-16 BOARD: Tape Running/Operation Hours Meter
 & REC Inhibit Switch
 TD-05 BOARD: Tape Detector
 TH-03 BOARD: Threading Motor
 TR-07 BOARD: Timer Roller Sensor
 MOTOR BOARD: Impedance Roller Motor
 RS-18 BOARD: Reel Size Sensor

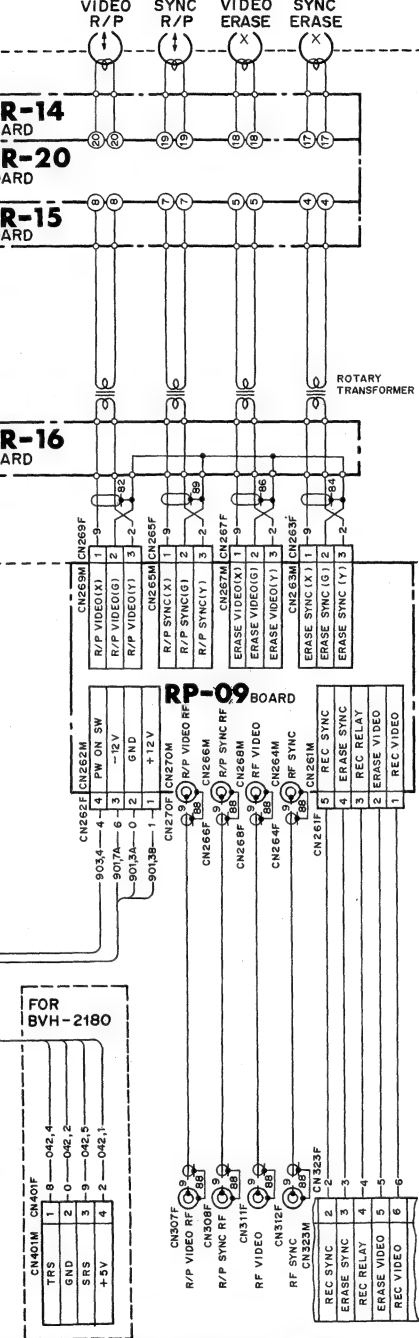
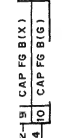




C-166

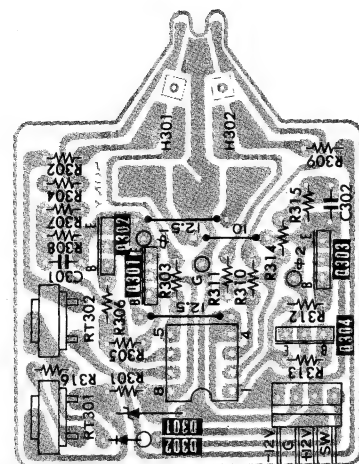
The diagram shows the RS-18 BOARD and RS-17 BOARD. The RS-18 BOARD has two REEL SIZE SENSOR inputs, D2-2L01F and D1-2L01F, each with pins 1, 2, 3, 4, 11, and 12. The RS-17 BOARD has a 12-pin connector with pins 1 through 12. The RS-16 BOARD (top) has pins 1 through 12, with pin 1 labeled CN041F and pin 12 labeled CN042M. The RS-15 BOARD (bottom) has pins 1 through 12, with pin 1 labeled CN041F and pin 12 labeled CN042M. The RS-18 BOARD is connected to the RS-16 BOARD via pins 1, 2, 3, 4, 11, and 12. The RS-17 BOARD is connected to the RS-15 BOARD via pins 1, 2, 3, 4, 11, and 12. The RS-16 BOARD is connected to the RS-15 BOARD via pins 1, 2, 3, 4, 11, and 12. The RS-16 BOARD is also connected to the RS-17 BOARD via pins 1, 2, 3, 4, 11, and 12.



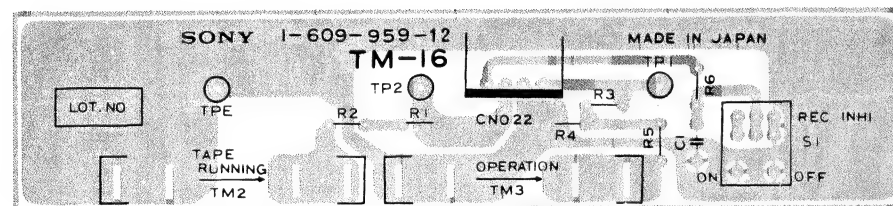


RS-18 BOARD (1-613-389-11)Solder Side
(FOR BVH-2180)1-613-389-11
SOLDER SIDE**MOTOR BOARD (1-602-615-11)**

Component Side

1-602-615-11
SOLDER SIDE**TM-16 BOARD (1-609-959-12)**

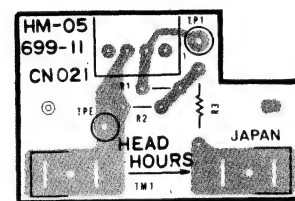
Component Side



1-609-959-12 SOLDER SIDE

HM-05 BOARD (1-606-699-11)

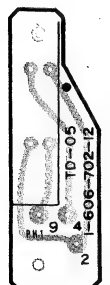
Component Side



1-606-699-11

TD-05 BOARD (1-606-702-12)

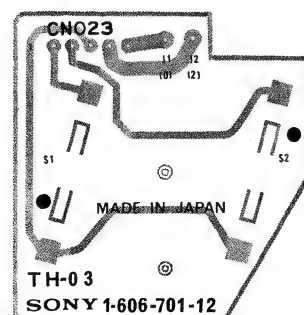
Component Side



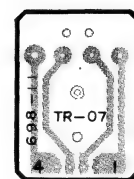
1-606-702-12

TH-03 BOARD (1-606-701-12)

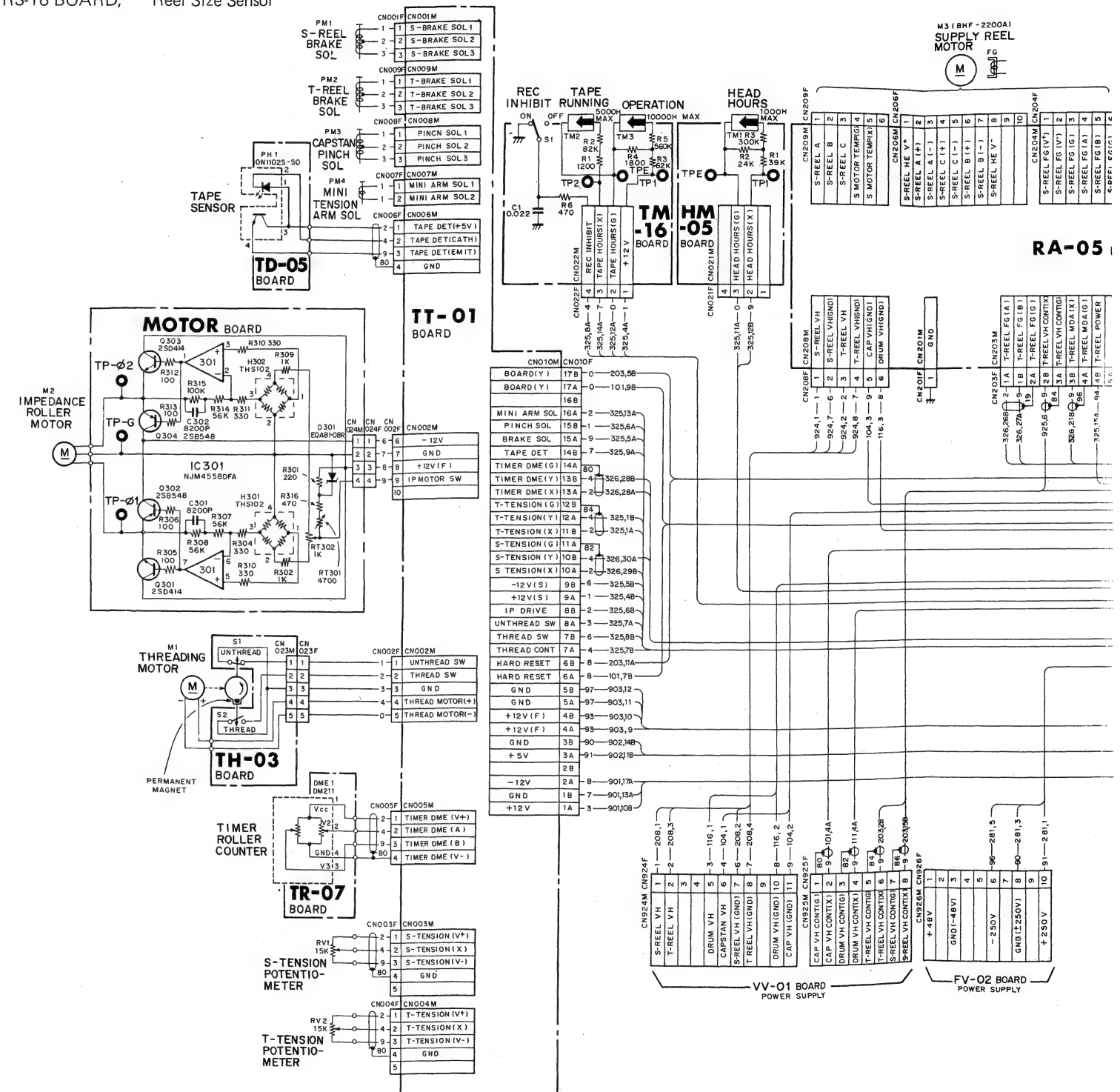
Solder Side

1-606-701-12
SOLDER SIDE**TR-07 BOARD (1-606-698-11)**

Solder Side

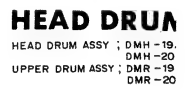
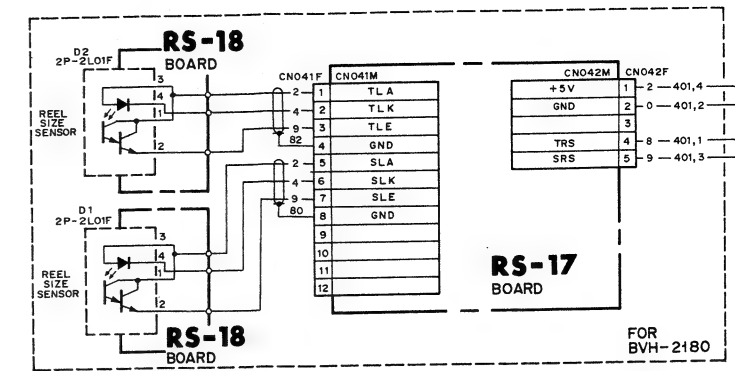
1-606-698-11
SOLDER SIDE**FRAME WIRING (1/2); TAPE TRANSPORT; FOR 12/14 MODEL**

- HM-05 BOARD: Head Hours Meter
 TM-16 BOARD: Tape Running/Operation Hours Meter
 & REC Inhibit Switch
 TD-05 BOARD: Tape Detector
 TH-03 BOARD: Threading Motor
 TR-07 BOARD: Timer Roller Sensor
 MOTOR BOARD: Impedance Roller Motor
 RS-17 BOARD: Reel Size Sensor
 RS-18 BOARD: Reel Size Sensor





HM-05 BOARD:	Head Hours Meter
TM-16 BOARD:	Tape Running/Operation Hours Meter & REC Inhibit Switch
TD-05 BOARD:	Tape Detector
TH-03 BOARD:	Threading Motor
TR-07 BOARD:	Timer Roller Sensor
MOTOR BOARD:	Impedance Roller Motor

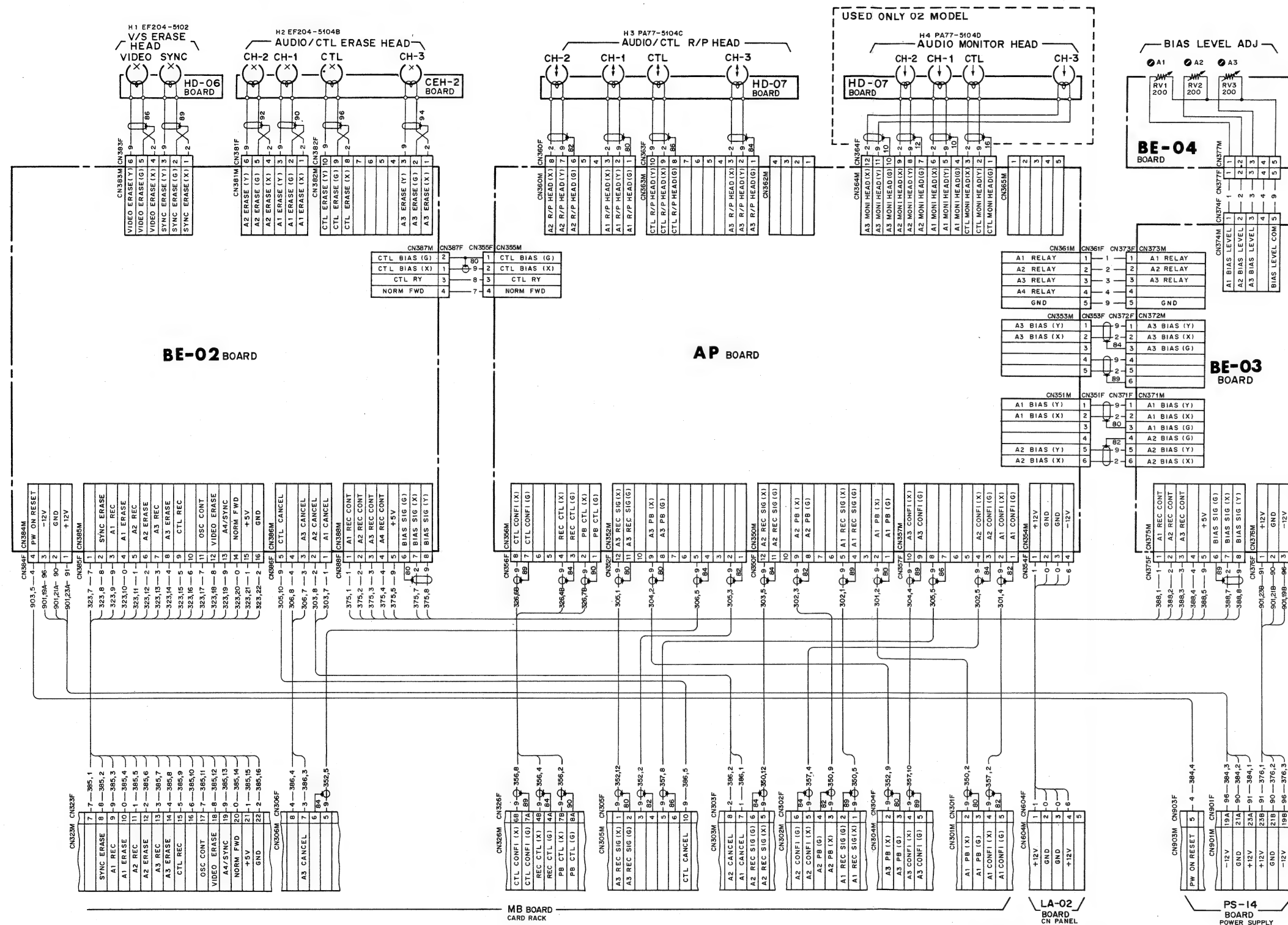




FRAME WIRING (2/2); TAPE TRANSPORT; FOR 00/10/02/12 MODEL

HD-06 BOARD: Video/Sync Erase Head
 CEH-2 BOARD: Audio/CTL Erase Head
 HD-07 BOARD: Audio/CTL R/P, Monitor Head

HD-06 BOARD (1-606-679-11)
 Solder Side

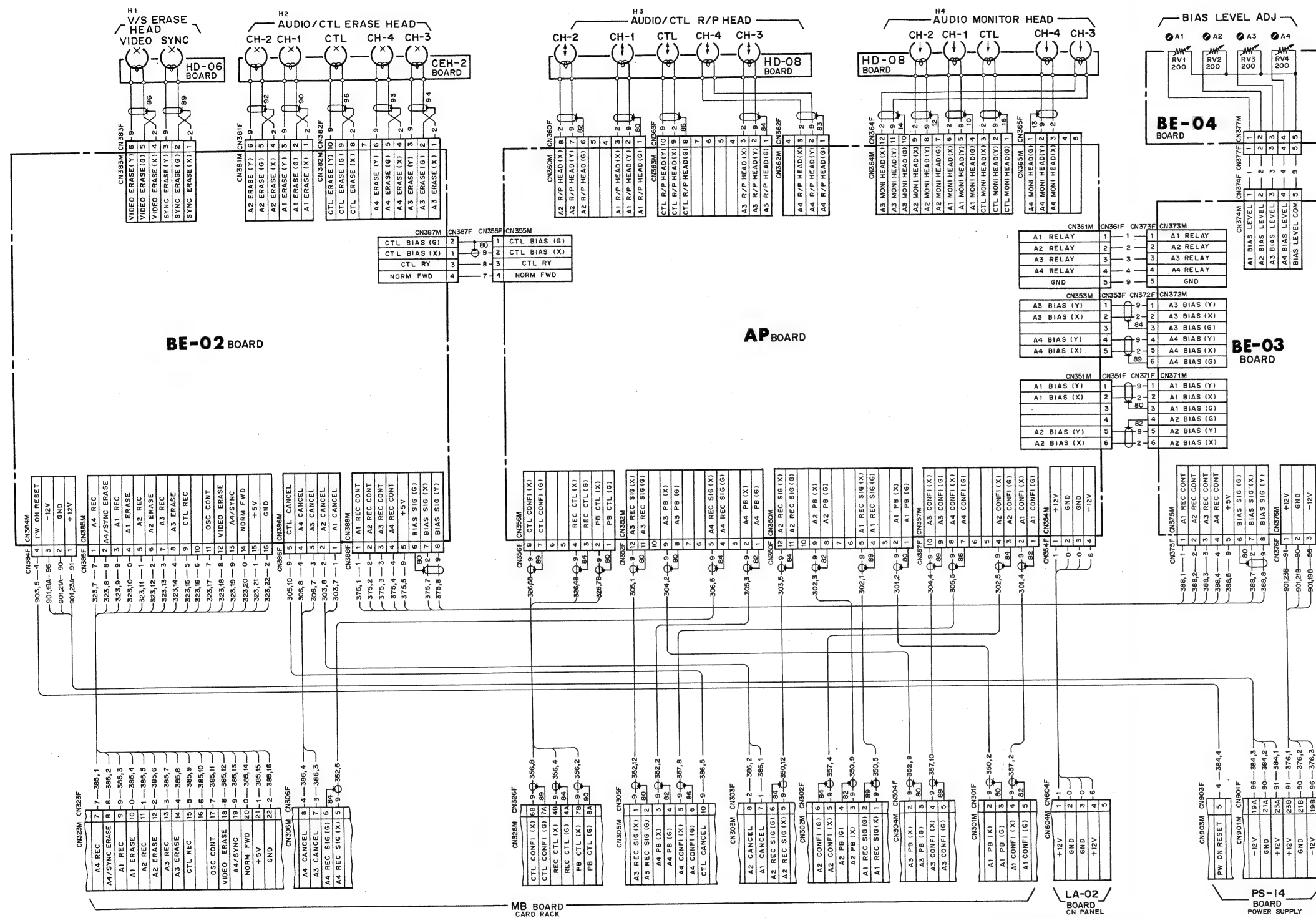
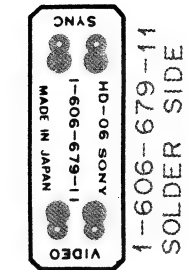


FRAME WIRING (2/2); TAPE TRANSPORT; FOR 04/14 MODEL

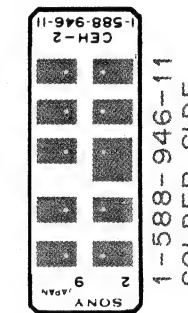
HD-06 BOARD; Video/Sync Erase Head
CEH-2 BOARD; Audio/CTL Erase Head
HD-08 BOARD; Audio/CTL R/P, Monitor Head

HD-06 BOARD (1-606-679-11)

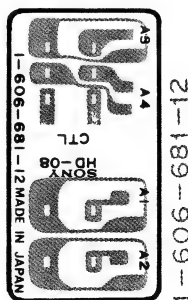
Solder Side

**CEH-2 BOARD (1-588-946-11)**

Solder Side

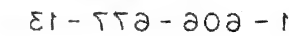
**HD-08 BOARD (1-606-681-12)**

Solder Side

**FRAME WIRING (FOR 04/14)
TAPE TRANSPORT(2/2)**

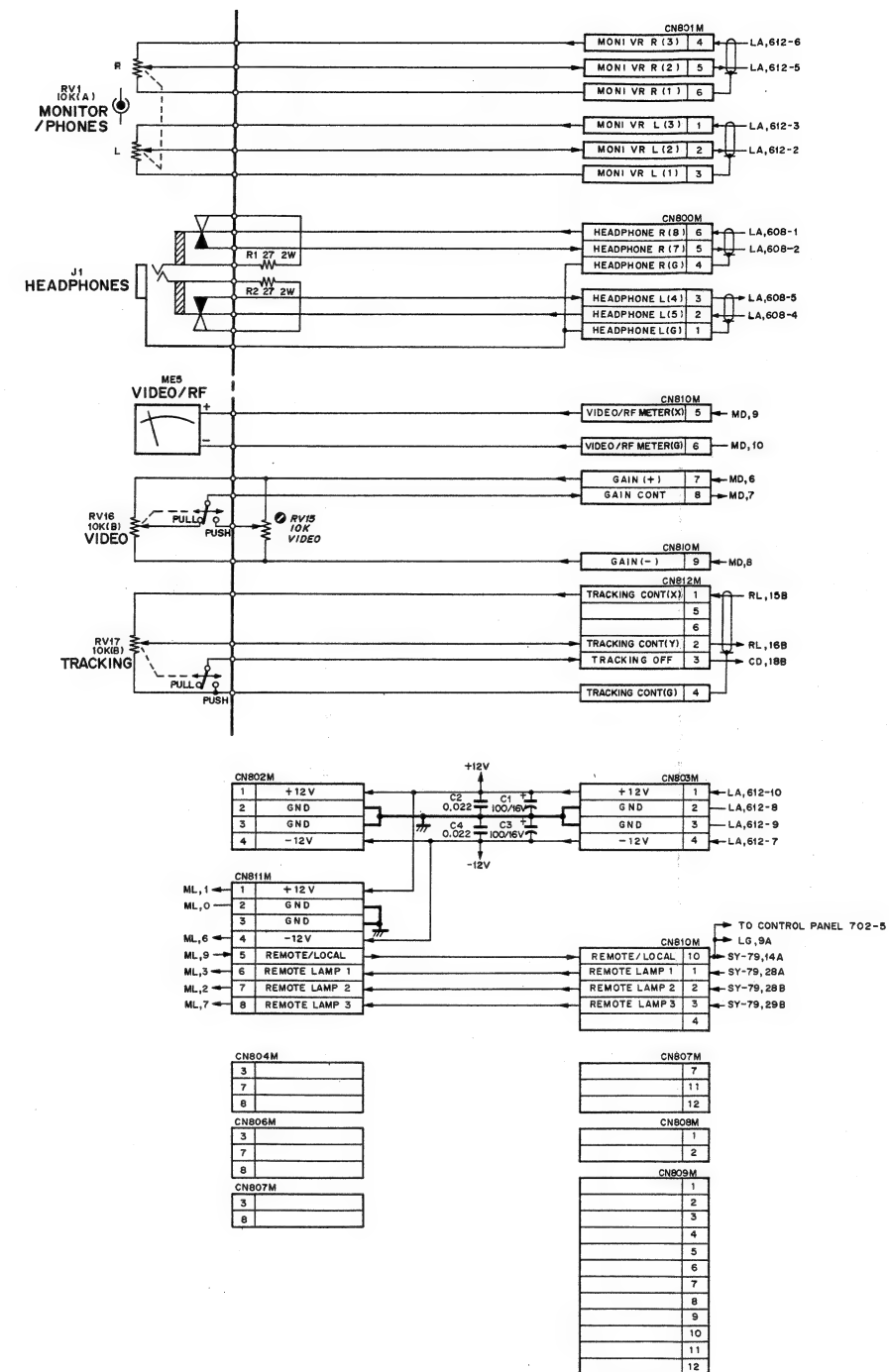
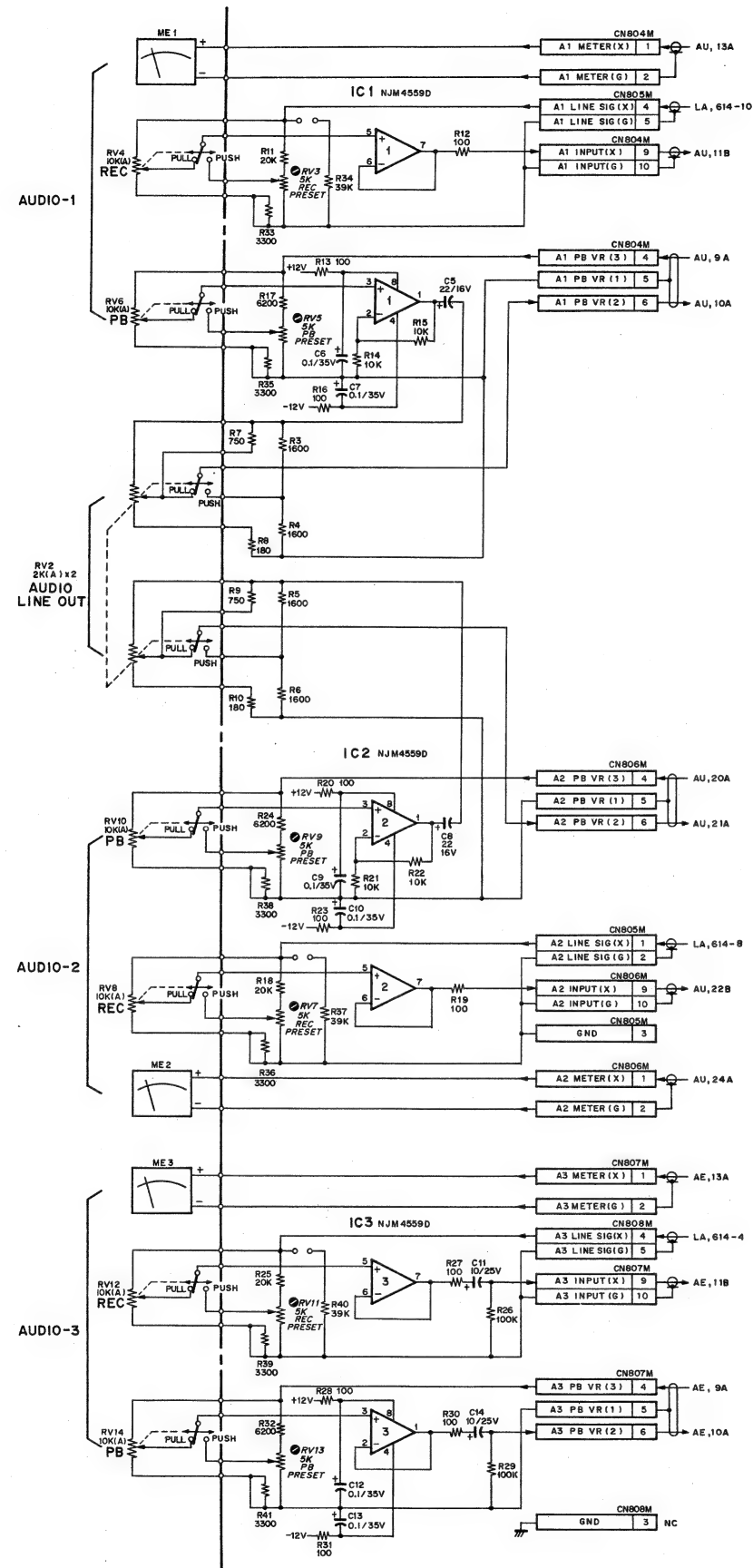
BVH-2000PS;#10001-
BVH-2180PS;#10001-

	BVH-2000/PS/PM	BVH-2180/PS/PM	169	C-170
1				



VR-05 BOARD; FOR 00/10/02/12 MODEL

Level Control/Indicator

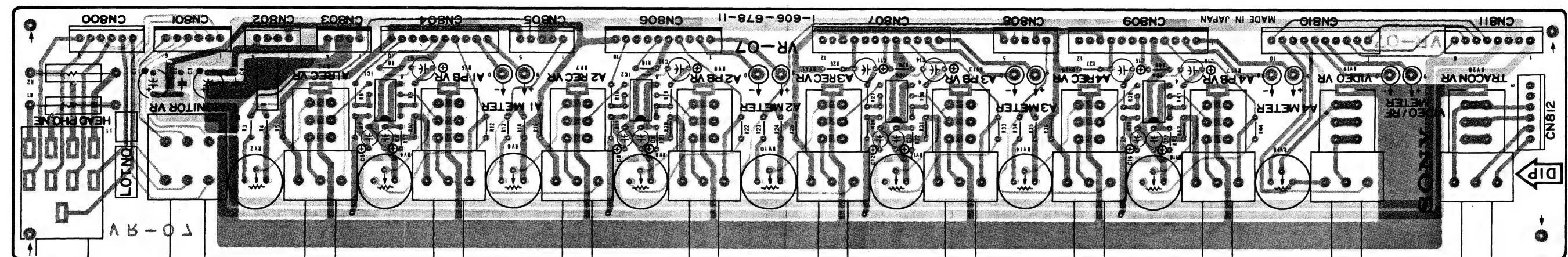


VR-05 BOARD FOR BVH-2000/PS/PM 00/10/02/12 MODEL, BVH-2180/PS/PM 00/02 MODEL & BVH-2500/P

BVH-2000(J); #10001-
 BVH-2000(U/C); #10001-
 BVH-2000PS; #10001-
 BVH-2000PM; #10001-
 BVH-2180(J); #10001-
 BVH-2180(U/C); #10001-
 BVH-2180PS; #10001-
 BVH-2180PM; #10001-
 BVH-2500(J); #10001-
 BVH-2500(U/C); #10001-
 BVH-2500P; #10001-

VR-07 BOARD (1-606-678-11) ; FOR 04/14 MODEL

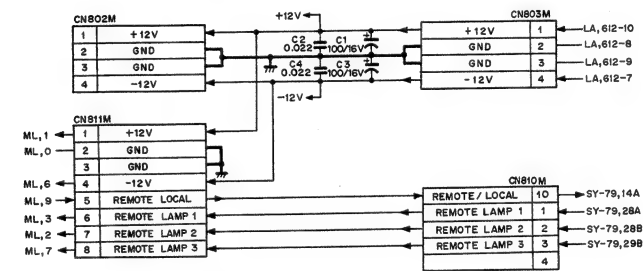
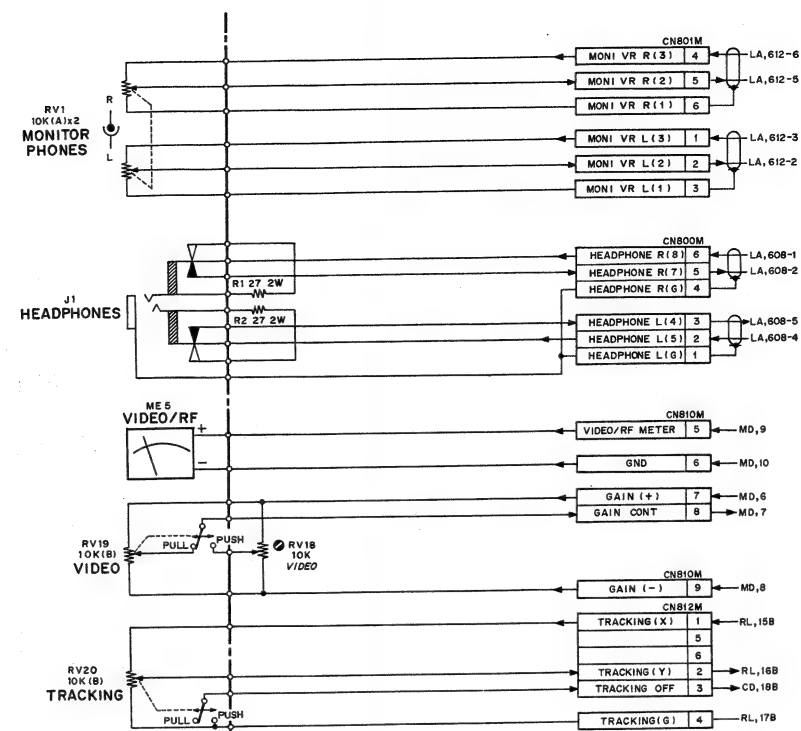
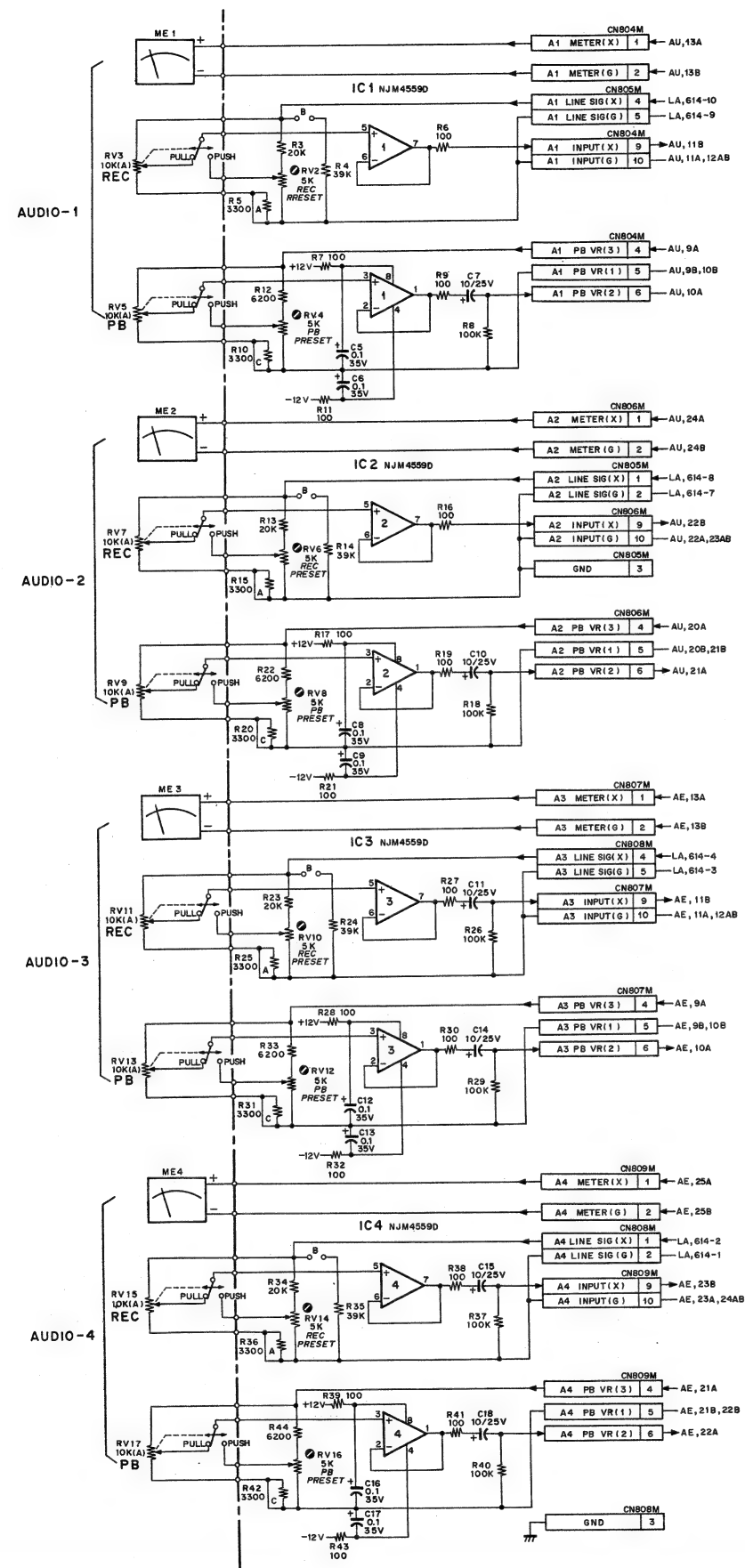
Component Side



1-606-678-11 COMPONENT SIDE

1-606-678-11

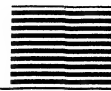
VR-07 BOARD; FOR 04/14 MODEL
Level Control/Indicator



CN806M	3	NC
CN806M	7	NC
CN806M	8	NC

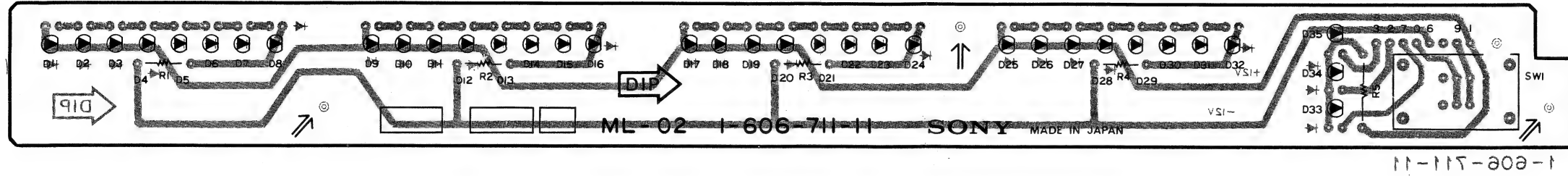
CN809M	NC	11
CN809M	NC	12
CN809M	NC	3
CN809M	NC	7
CN809M	NC	8

VR-07 BOARD (FOR 04/14)
BOARD NO. 1-606-678-11
BVH-2000PS; #10001-
BVH-2180PS; #10001-



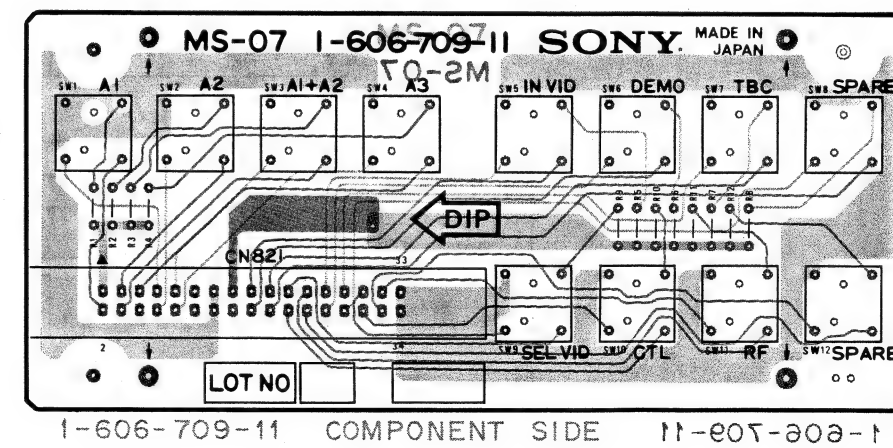
ML-02 BOARD (1-606-711-11) ; FOR 00/10/02/12 MODEL

Component Side



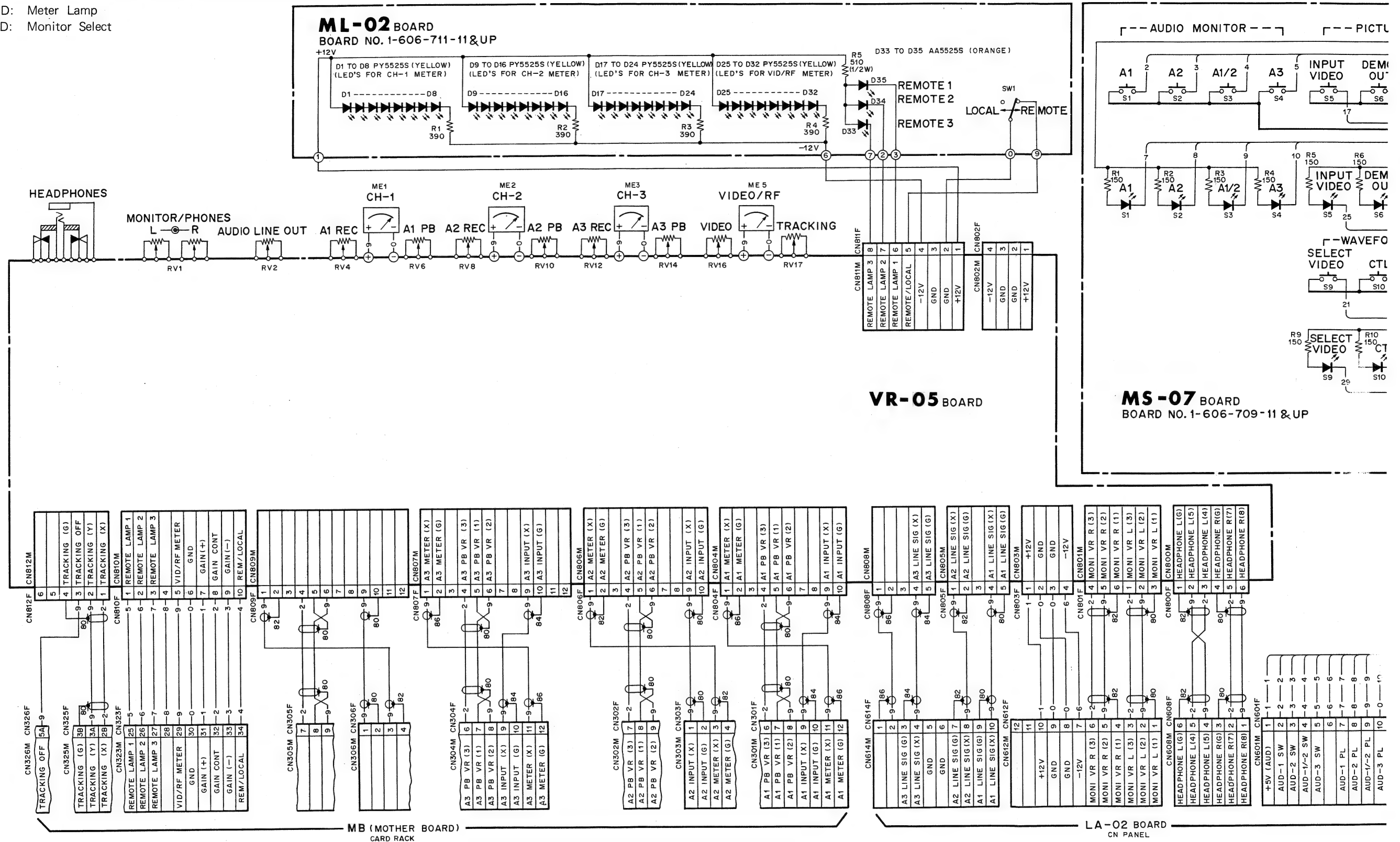
MS-07 BOARD (1-606-709-11)

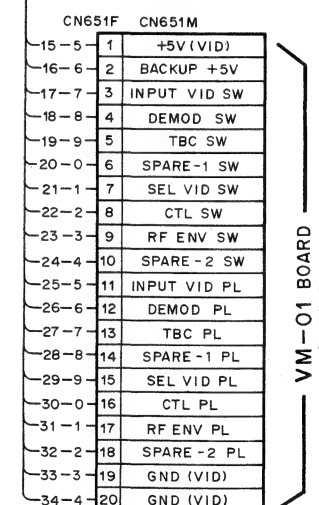
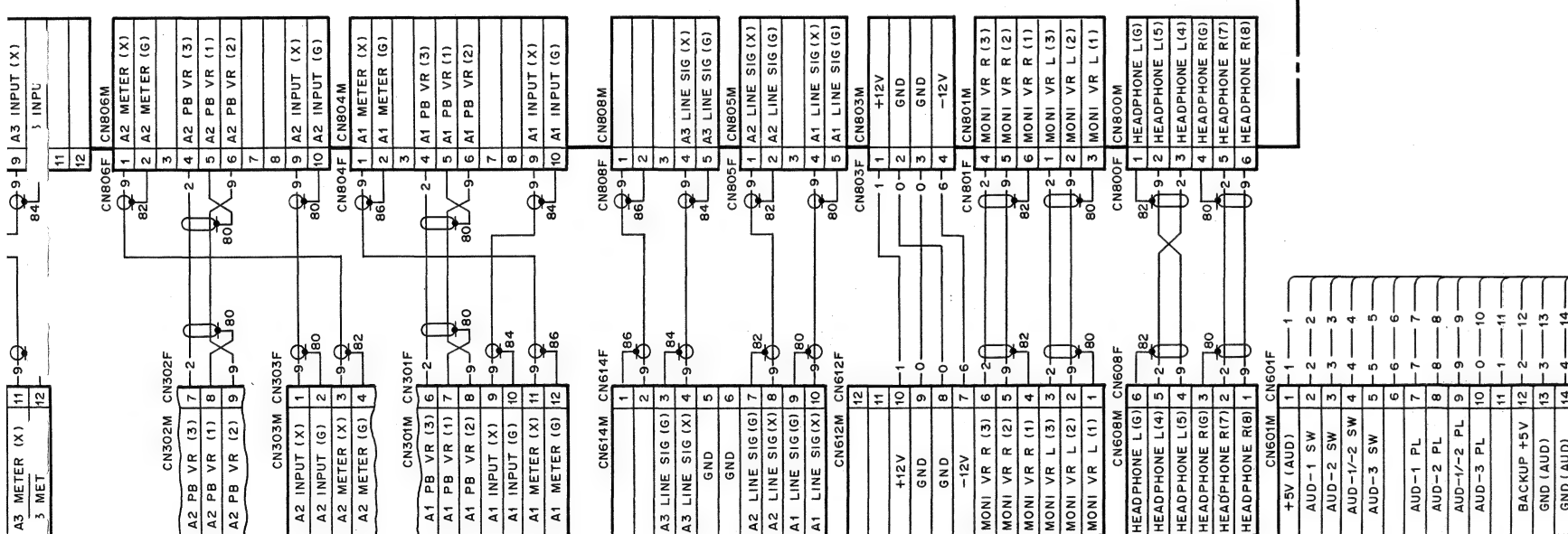
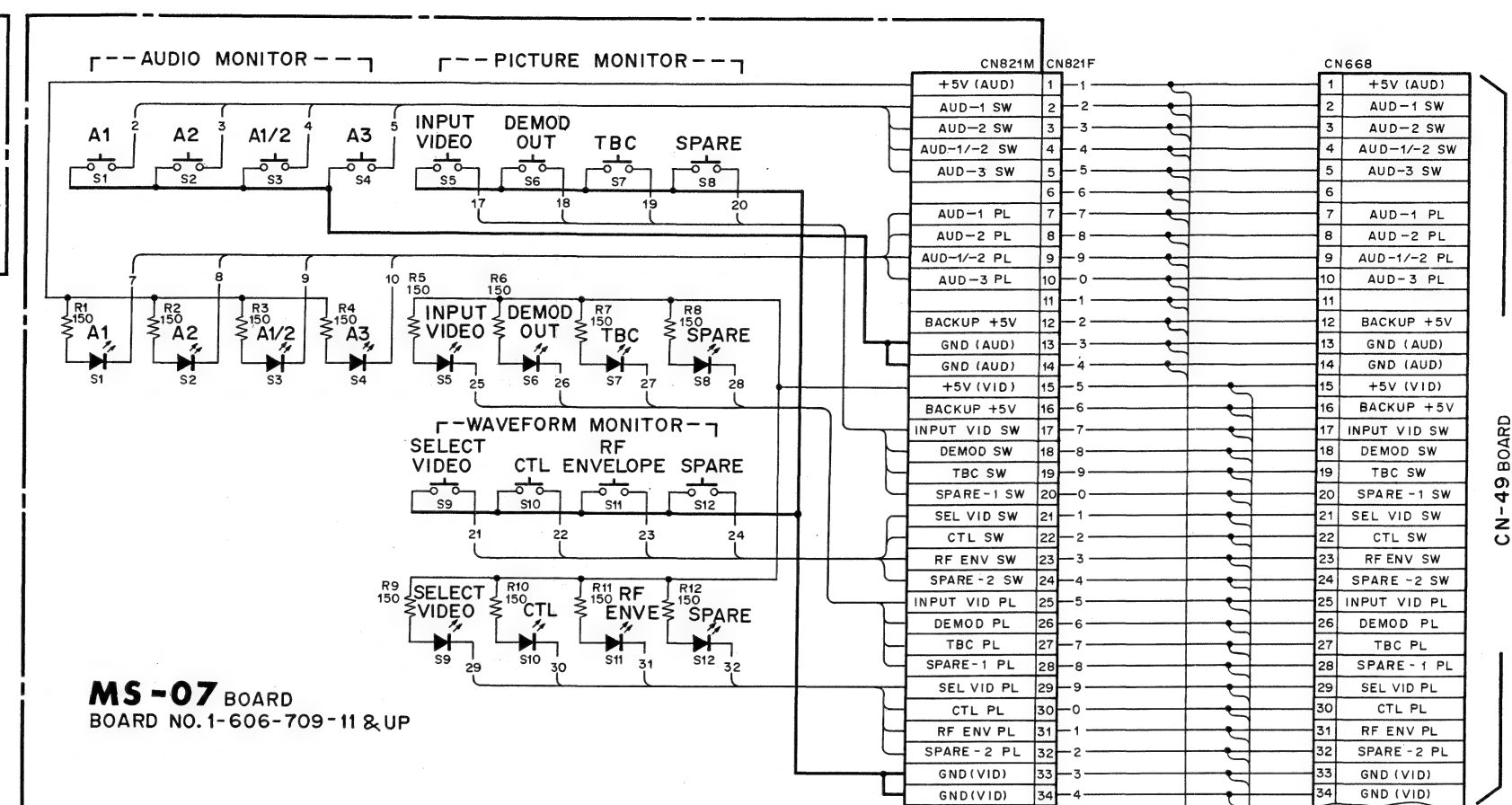
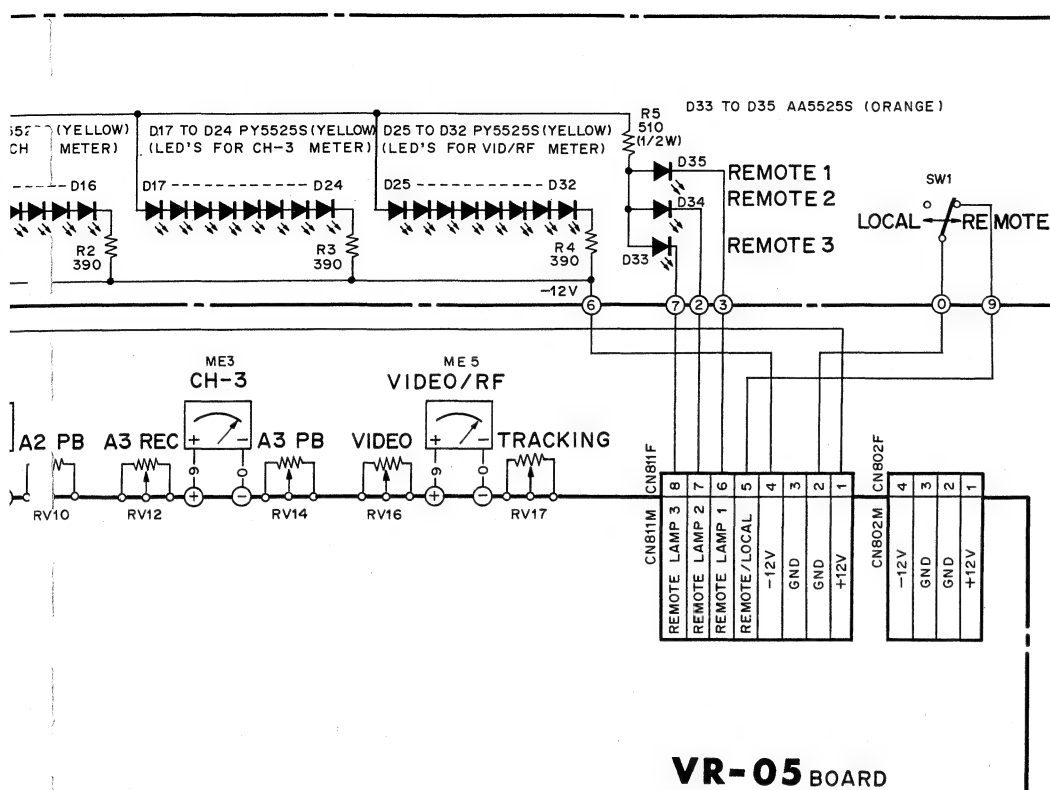
Component Side



FRAME WIRING; LEVEL CONTROL PANEL; FOR 00/10/02/12 MODEL

ML-02 BOARD: Meter Lamp
MS-07 BOARD: Monitor Select



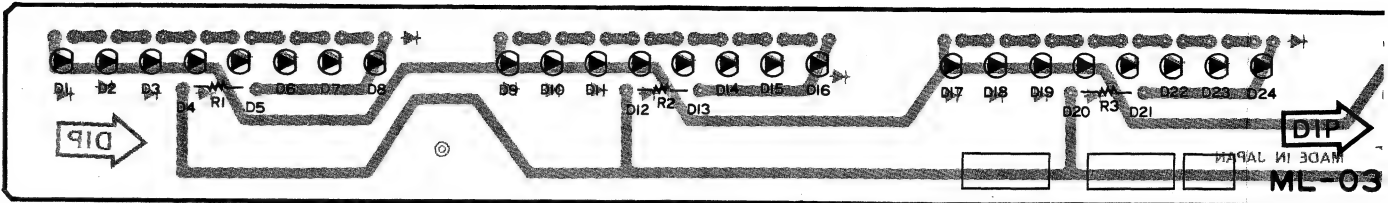


FRAME WIRING FOR BVH-2000/PS/PM 00/10/02/12 MODEL, BVH-2180/PS/PM 00/02 MODEL, & BVH-2500/P

BVH-2000(J); #10001-
BVH-2000(U/C); #10001-
BVH-2000PS; #10001-
BVH-2000PM; #10001-
BVH-2180(J); #10001-
BVH-2180(U/C); #10001-
BVH-2180PS; #10001-
BVH-2180PM; #10001-
BVH-2500(J); #10001-
BVH-2500(U/C); #10001-
BVH-2500P; #10001-

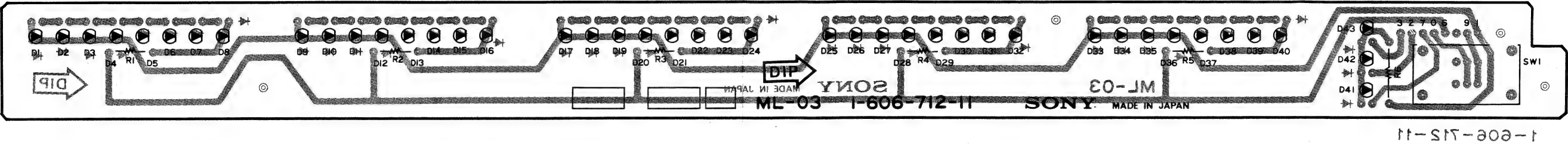


ML-03 BOARD (1-606-712-11)
Component Side



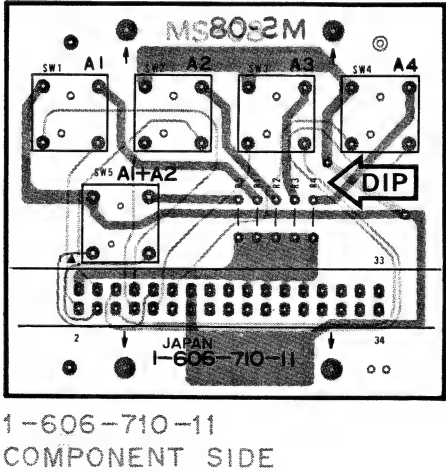
ML-03 BOARD (1-606-712-11)

Component Side



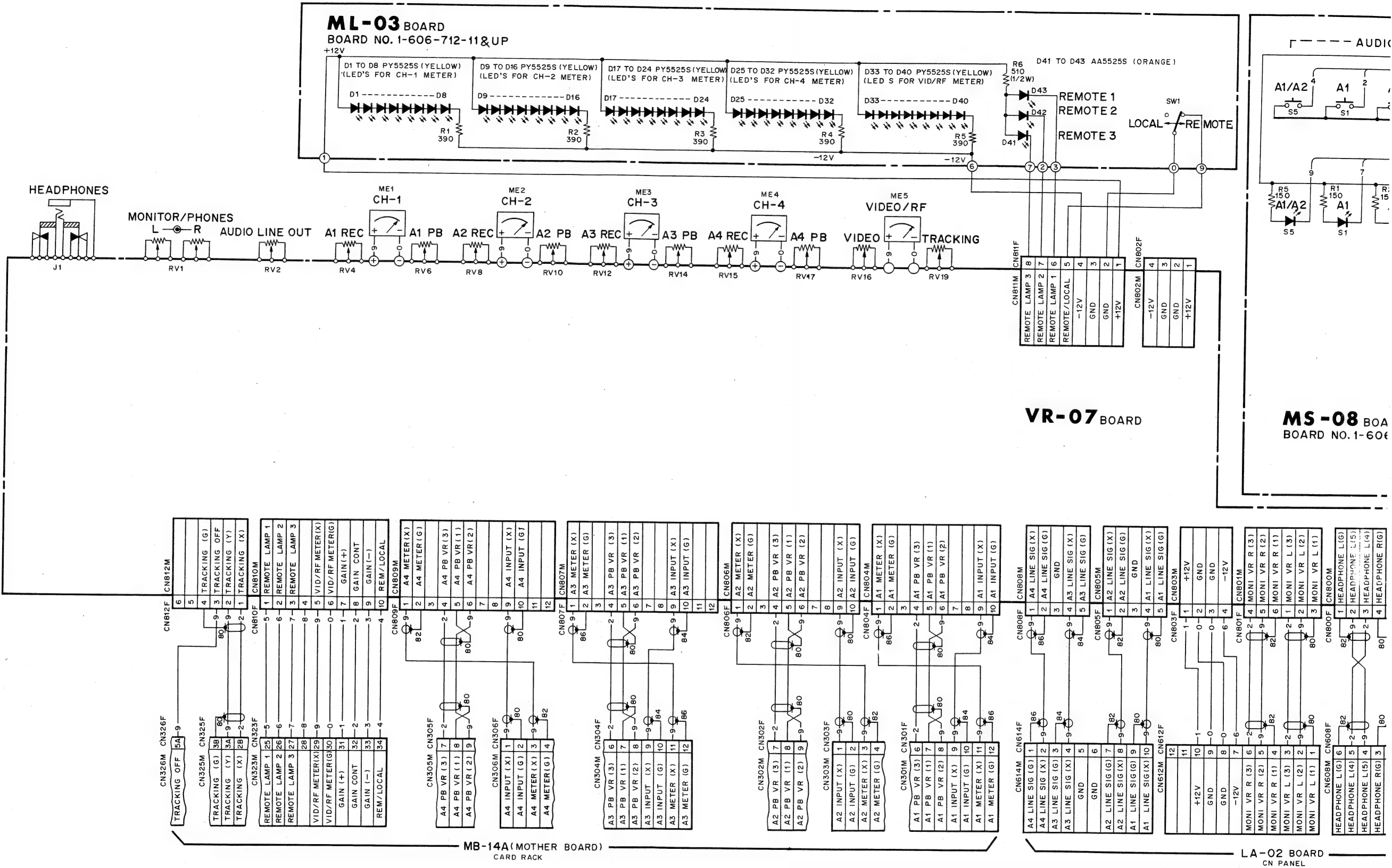
MS-08 BOARD (1-606-710-11)

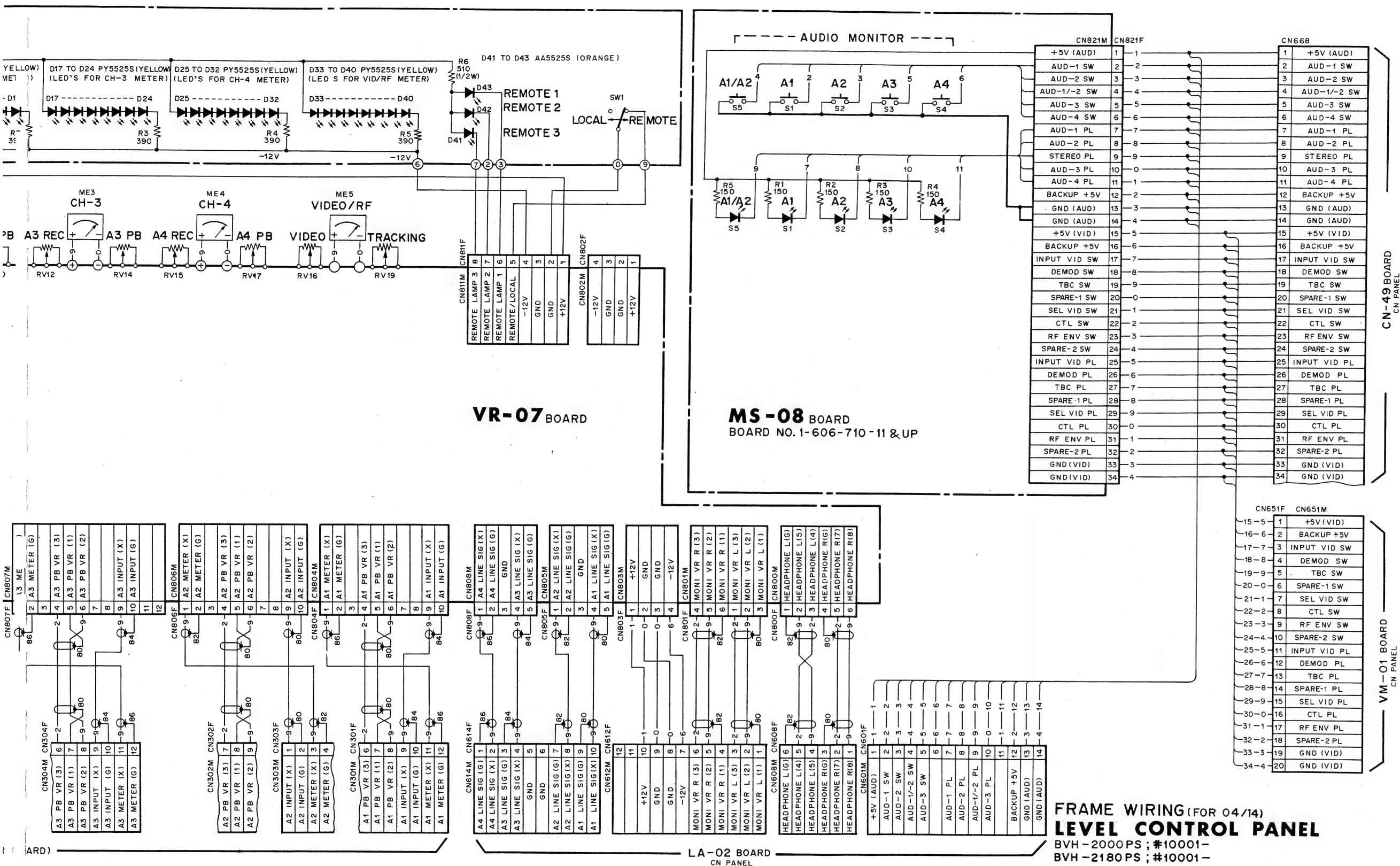
Component Side



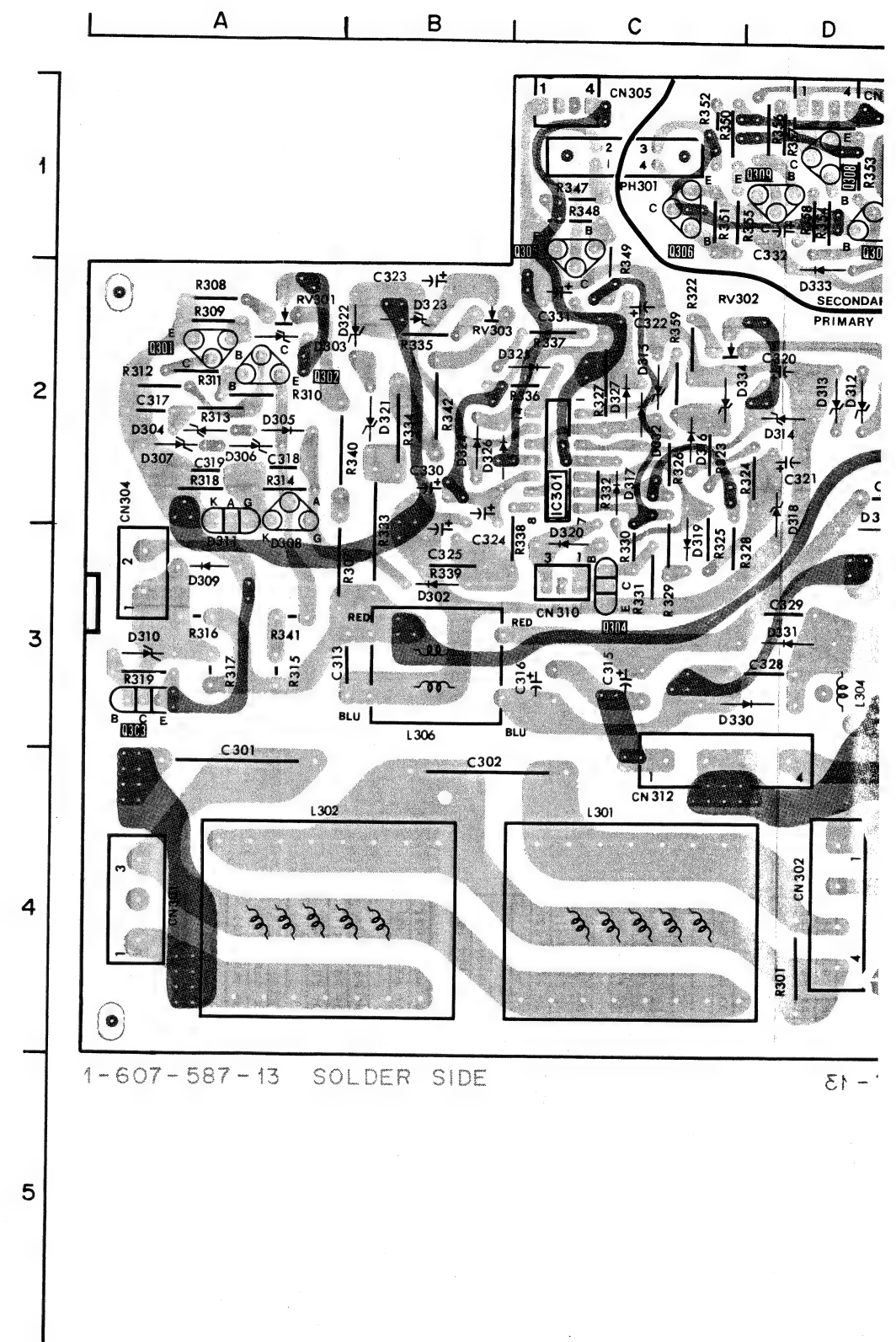
FRAME WIRING; LEVEL CONTROL PANEL; FOR 04/14 MODEL

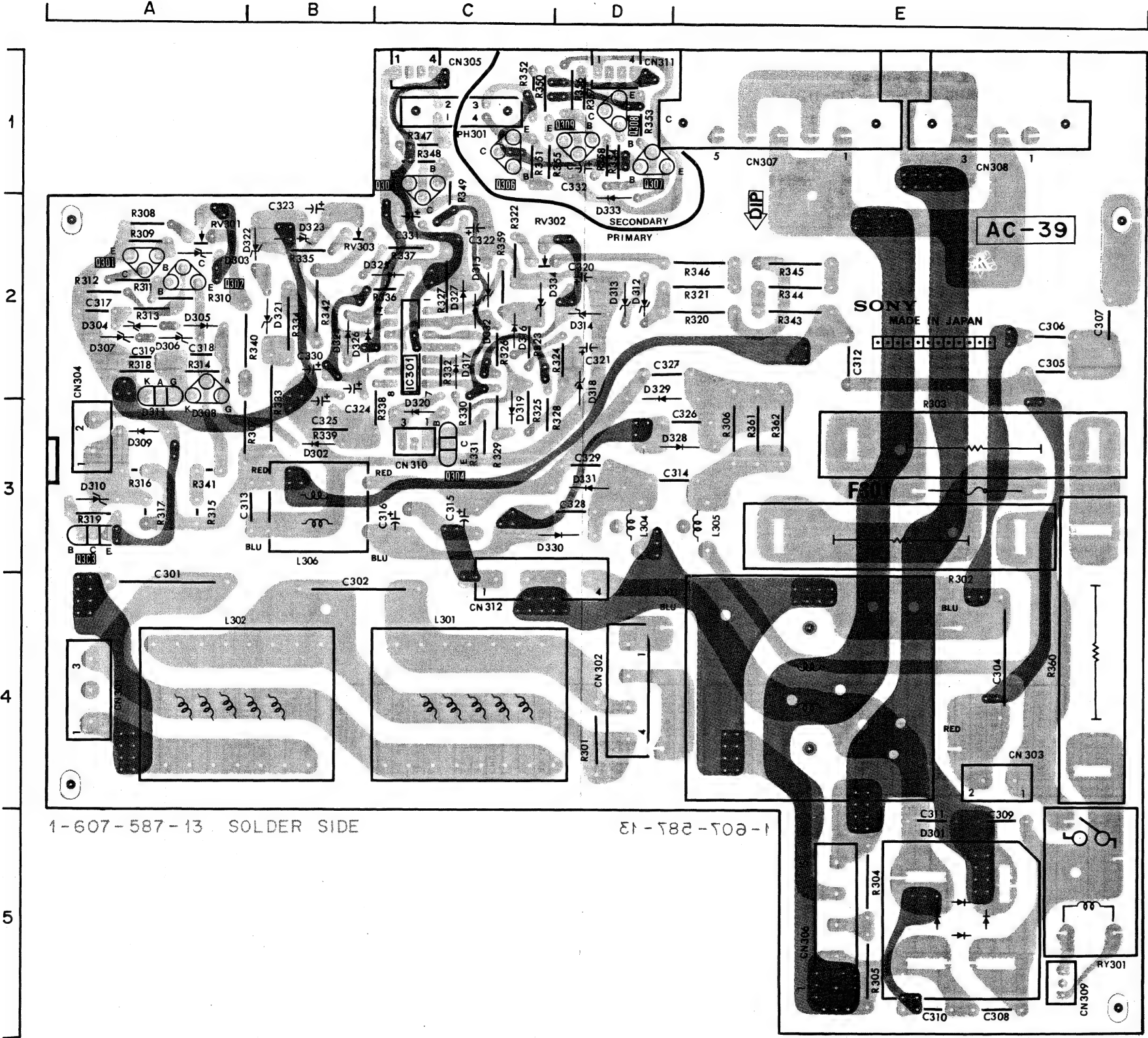
ML-03 BOARD; Meter Lamp
MS-08 BOARD; Monitor Select





Solder Side





AC-39 (1-607-587-13 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CN301F
4A
CN302F
4D
CN303M
4E
CN304F
3A
CN305M
1C
CN306M
5E
CN307M
1E
CN308M
1E
CN309M
5E
CN310M
3C
CN311M
1D
CN312M
4C

D301 5E
D302 3B
D303 2A
D304 2A
D305 2A
D306 2A
D307 2A
D308 2A
D309 3A
D310 3A
D311 2A
D312 2D
D313 2D
D314 2D
D315 2C
D316 2C
D317 2C
D318 2D
D319 3C
D320 3C
D321 2B
D322 2B
D323 2B
D324 2B
D325 2C
D326 2B
D327 2C
D328 3E
D329 2D
D330 3D
D331 3D
D332 2C
D333 2D
D334 2C

IC301 2C

PH301 1C

Q301 2A
Q302 2A
Q303 3A
Q304 3C
Q305 1C
Q306 1C
Q307 1D
Q308 1D
Q309 1D

RV301 2A
RV302 2C
RV303 2B

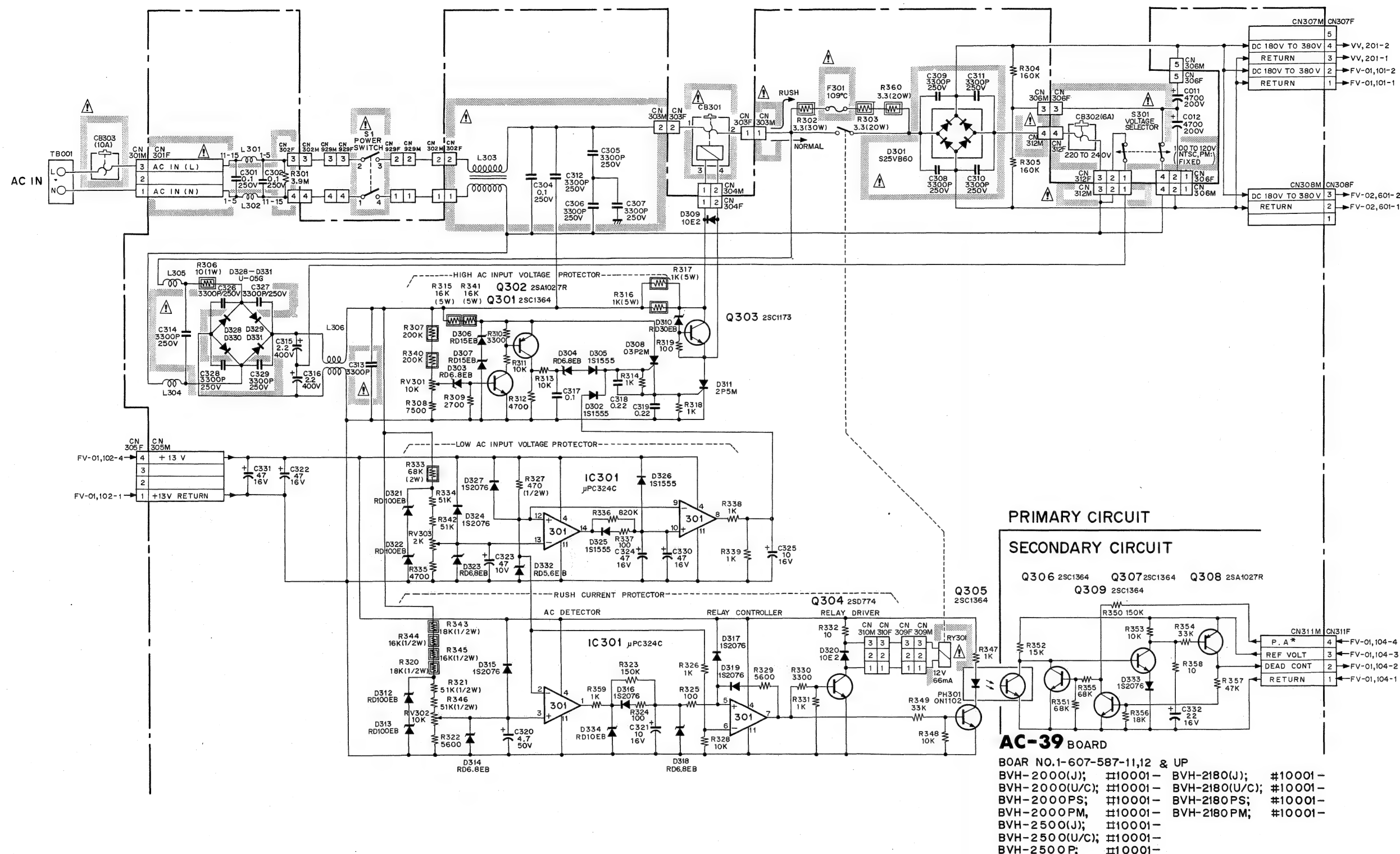
RY301 5E

AC-39 BOARD

Primary Rectifier

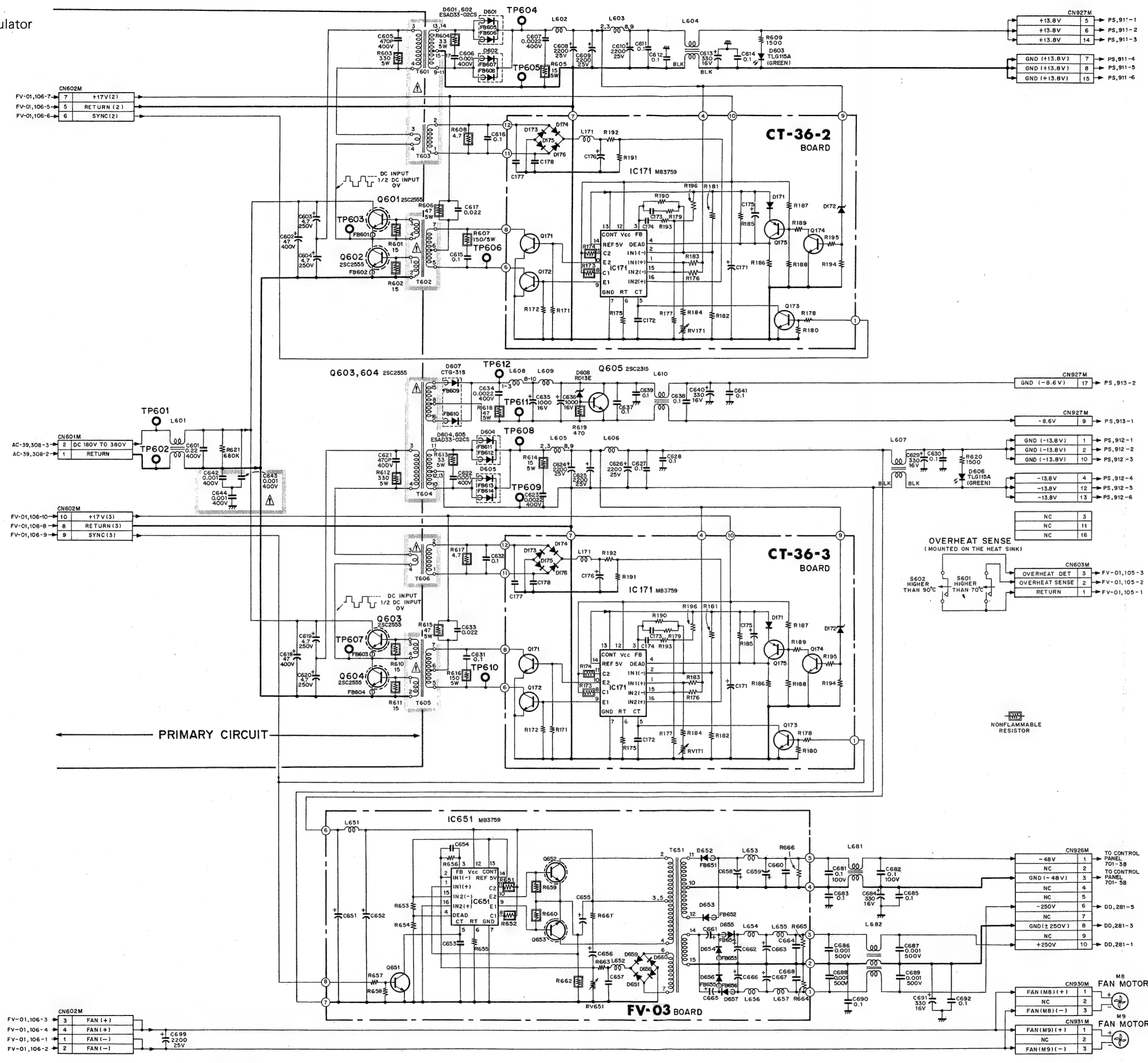
POWER SUPPLY AC-39

AC-39 POWER SUPPLY



FV-02 BOARD

Switching Regulator

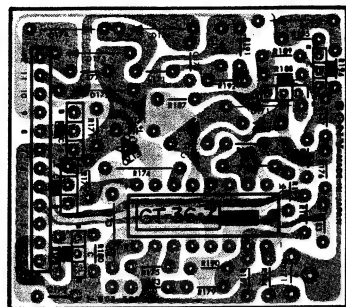


FV-02 BOARD
BOARD NO. 1-607-590-11 & UP

BUARD NO: 1-607-330-1201

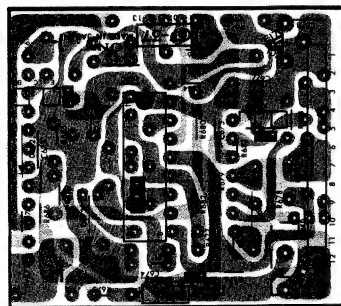
BVH-2000(J); #10001-	BVH-2500(J); #10001-
BVH-2000(U/C); #10001-	BVH-2500(U/C); #10001-
BVH-2000PS; #10001-	BVH-2500P; #10001-
BVH-2000PM; #10001-	
BVH-2180(J); #10001-	
BVH-2180(U/C); #10001-	
BVH-2180PS; #10001-	
BVH-2180PM; #10001-	

CT-36-7 BOARD
(1-607-591-53)
Solder Side



VV-01 BOARD
(1-607-589-13)
Solder Side

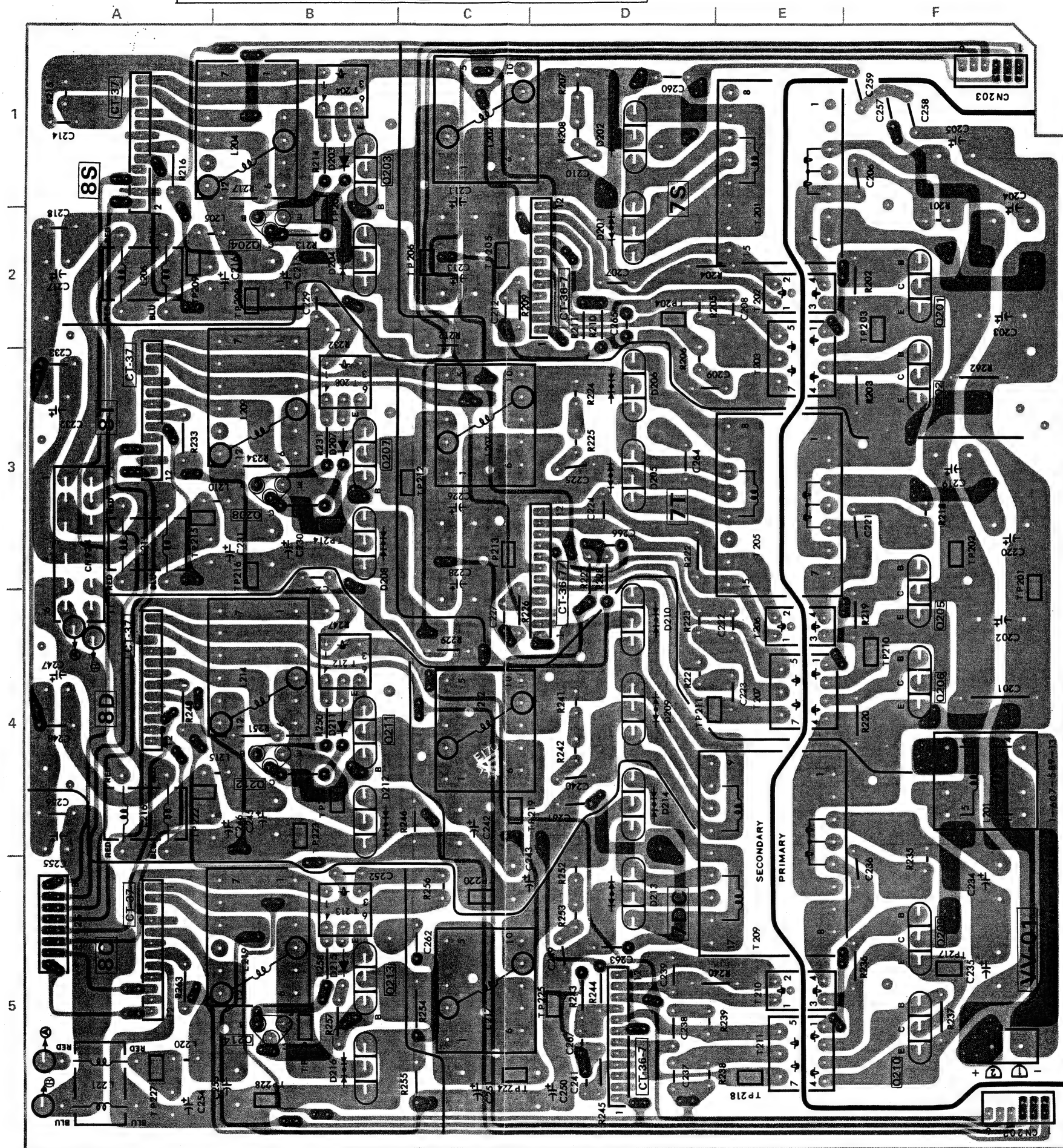
CT-37 BOARD
(1-607-592-13)
Solder Side



1-607-591-53
SOLDER SIDE
88-182-103-1

1-607-592-13
SOLDER SIDE
81-582-103-1

C-187



C-188

■ 1-607-589-13 SOLDER SIDE

■ 1-607-589-13 COMPONENT SIDE

VV-01 (1-607-589-12 & UP)	
BVH-2000/PS/PM	
BVH-2180/PS/PM	
BVH-2500/P	
CN201M	5F
CN202M	5F
CN203M	1F
CN924M	3A
CN925M	5A
D201	2D
D202	1D
D203	1B
D204	2B
D205	3D
D206	3D
D207	3B
D208	3B
D209	4D
D210	4D
D211	4B
D212	4B
D213	5D
D214	4D
D215	5B
D216	5B
Q201	2F
Q202	3F
Q203	1B
Q204	2B
Q205	3F
Q206	4F
Q207	3B
Q208	3B
Q209	5F
Q210	5F
Q211	4B
Q212	4B
Q213	5B
Q214	5B
TP201	3F
TP202	3F
TP203	2F
TP204	2D
TP205	2C
TP206	2C
TP207	2B
TP208	2B
TP209	2A
TP210	4F
TP211	4D
TP212	3C
TP213	3C
TP214	3B
TP215	3A
TP216	3B
TP217	5F
TP218	5E
TP219	4C
TP220	5C
TP221	4B
TP222	4A
TP223	4B
TP224	5C
TP225	5D
TP226	5B
TP227	5A
TP228	5B

BVH-2500/P

C-217

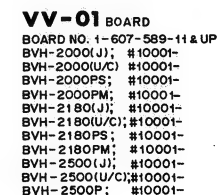
C-218

BVH-2000/PS/PM

C-187

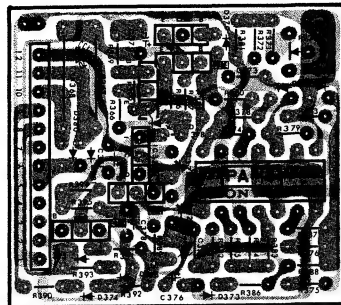
C-188

BVH-2180/PS/PM



PA-19 BOARD
(1-607-594-14)

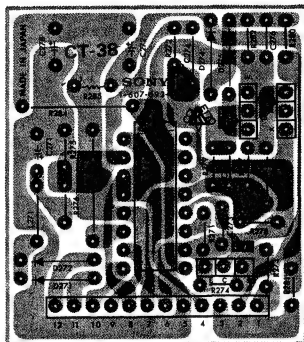
Solder Side



1-607-594-14
SOLDER SIDE
41-102-508-1

CT-38 BOARD
(1-607-593-13)

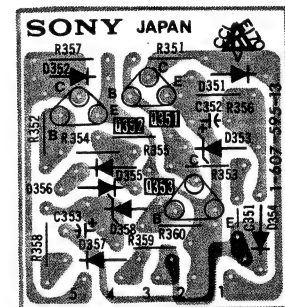
Solder Side



1-607-593-13
SOLDER SIDE
1-607-593-13
COMPONENT SIDE

ST-21 BOARD
(1-607-595-13)

Solder Side



1-607-595-13
SOLDER SIDE
1-607-595-13
COMPONENT SIDE

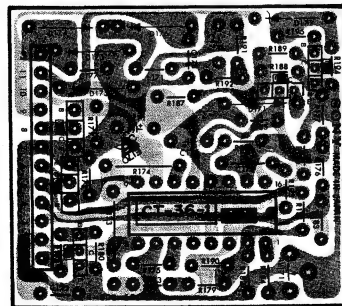
L103,104

WHITE LINE

(-)
(+)

CT-36-1 BOARD
(1-607-591-13)

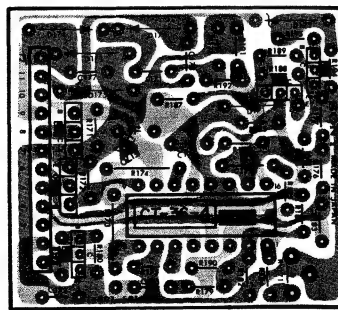
Solder Side



1-607-591-13
SOLDER SIDE
41-102-508-1

CT-36-4 BOARD
(1-607-591-43)

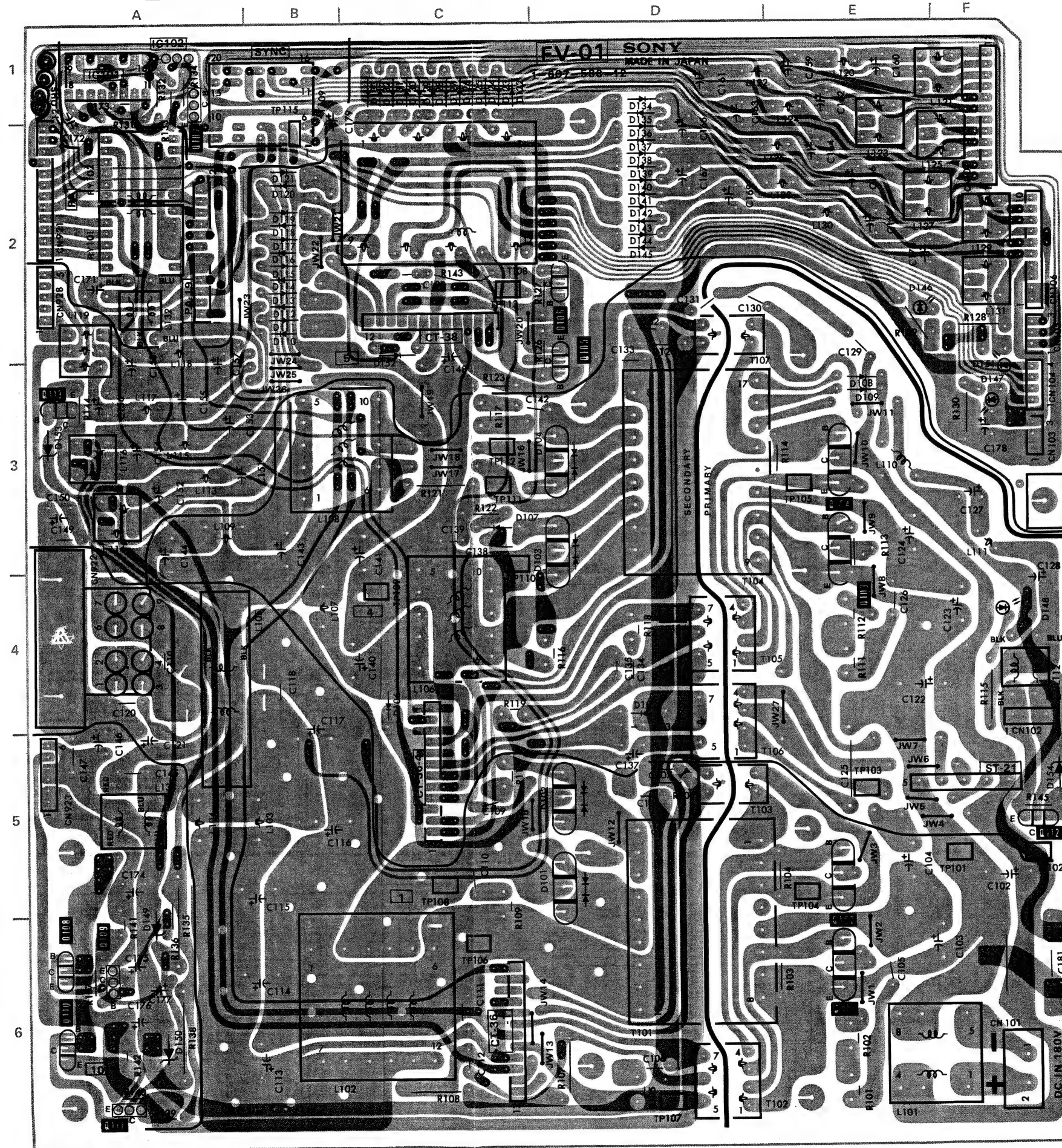
Solder Side



1-607-591-43
SOLDER SIDE
41-102-508-1

POWER SUPPLY FV-01

FV-01 POWER SUPPLY



1-607-588-12 COMPONENT SIDE

1-607-588-12 SOLDER SIDE

FV-01 (1-607-588-11 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CN101M 6F
CN102M 4F
CN103M 3F
CN104M 3F
CN105M 2F
CN106M 2F
CN107M 2F
CN921M 2A
CN922F 4A
CN923M 5A
CN928M 2A

D101 5D
D102 5D
D103 3D
D104 3D
D105 4D
D106 4C
D107 3C
D108 3E
D109 3E
D110 2B
D111 2B
D112 2B
D113 2B
D114 2B
D115 2B
D116 2B
D117 2B
D118 2B
D119 2B
D120 2B
D121 2B
D122 1C
D123 1C
D124 1C
D125 1C
D126 1C
D127 1C
D128 1C
D129 1C
D130 1C
D131 1C
D132 1C
D133 1C
D134 1D
D135 1D
D136 2D
D137 2D
D138 2D
D139 2D
D140 2D
D141 2D
D142 2D
D143 2D
D144 2D
D145 2D
D146 2E
D147 3F
D148 4F
D149 6A
D150 3F
D151 3F
D152 2C
D153 3A
D154 5F

IC101 1A
IC102 1A

Q101 6E
Q102 5E
Q103 3E
Q104 3E
Q105 2D
Q106 2D
Q107 1A
Q108 6A
Q109 6A
Q110 6A
Q111 6A
Q112 5F
Q113 3A

RY101 2A
RY102 2A

S101 4D
S102 6D

TP101 5F
TP102 5F
TP103 5E
TP104 5E
TP105 3E
TP106 6C
TP107 6D
TP108 5C
TP109 4C
TP110 3C
TP111 3C
TP112 3C
TP113 2C
TP115 2B
TP116 4D

C-194

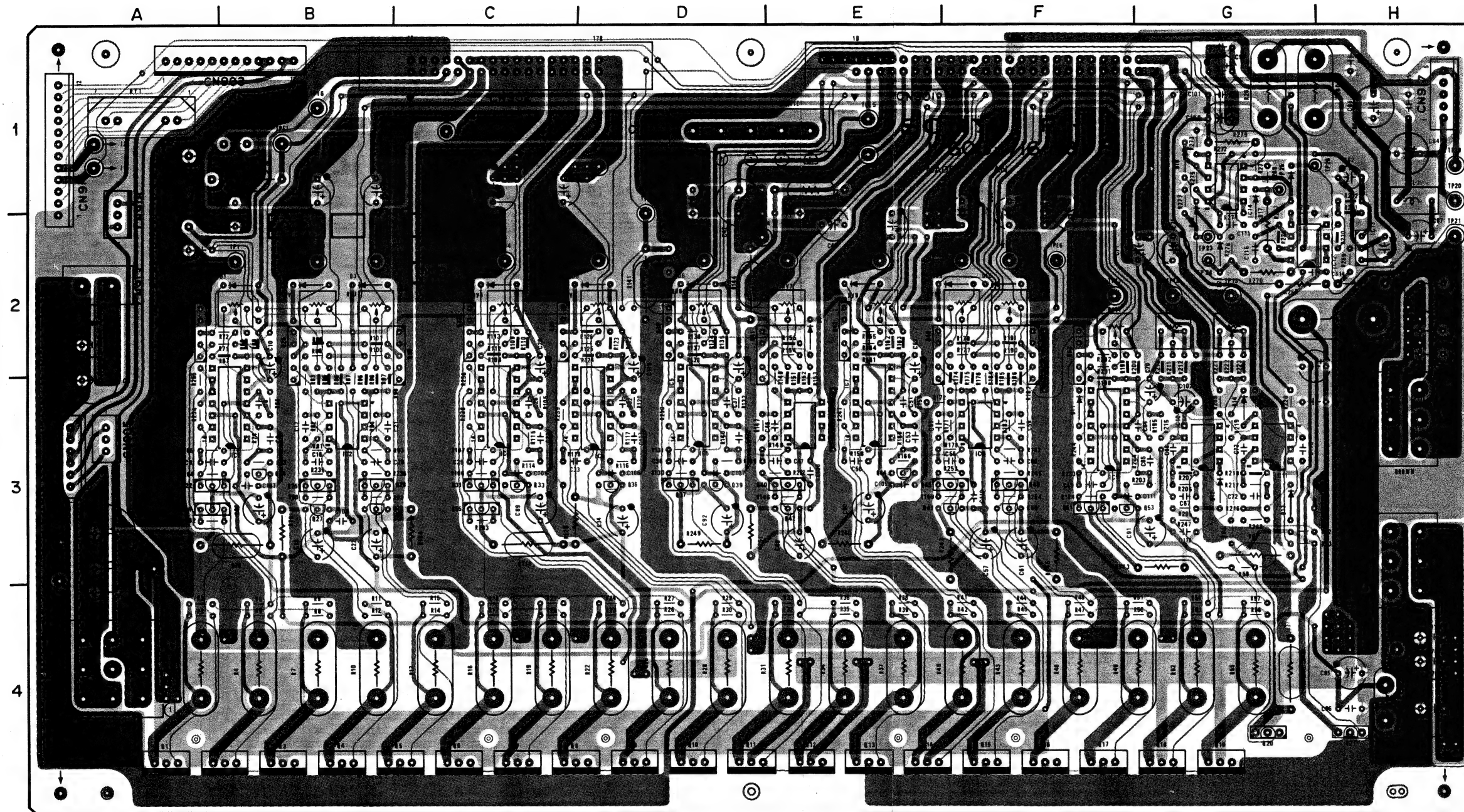
PS-14 BOARD (1-606-716-13)
Component Side

1-606-716-13

POWER SUPPLY PS-14

PS-14 POWER SUPPLY

1-606-716-13



1-606-716-13 COMPONENT SIDE

1-606-716-13

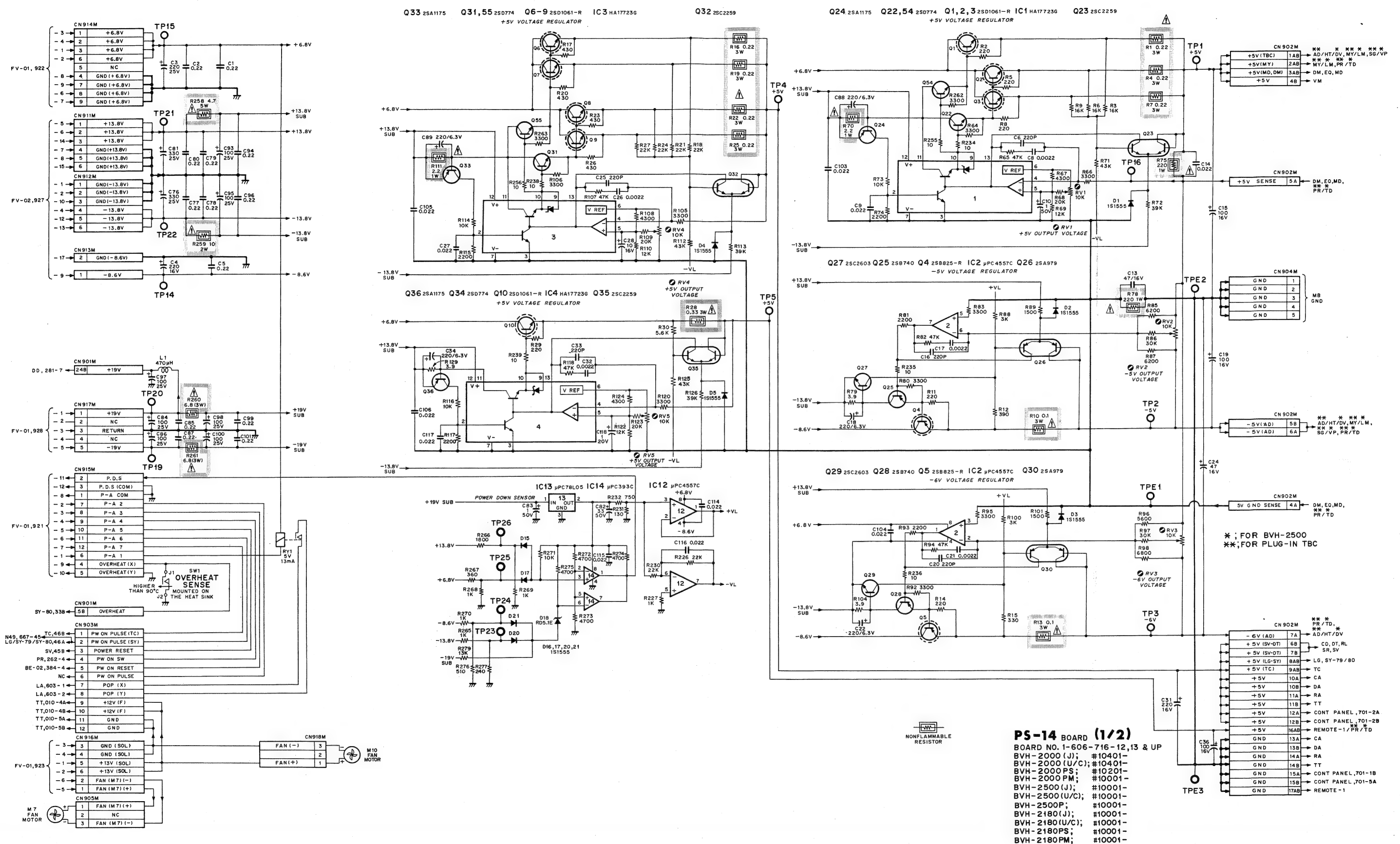
PS-14 (1-606-716-13 & UP)			
BVH-2000/PS/PM	Q20	4G	
BVH-2180/PS/PM	Q21	4H	
BVH-2500/P	Q22	3A	
	Q23	2A	
CN901M	Q24	3B	
1F	Q25	3B	
CN902M	Q26	2B	
1C	Q27	3B	
CN903M	Q28	3B	
1B	Q29	3B	
CN904M	Q30	2C	
1D	Q31	3C	
CN905M	Q32	2C	
3A	Q33	3C	
CN911M	Q35	2C	
3H	Q36	3D	
CN912M	Q37	3D	
3H	Q38	2D	
CN913M	Q39	3D	
2A	Q40	3E	
CN914M	Q41	2D	
4A	Q42	3E	
CN915M	Q43	2E	
1A	Q44	3E	
CN916M	Q45	3F	
3A	Q46	2E	
CN917M	Q47	3F	
1H	Q48	3F	
CN918M	Q49	2F	
1A	Q50	3F	
	Q51	3F	
D1	Q52	2F	
D2	Q53	3F	
D3	Q54	3A	
D4	Q55	3C	
D5			
D6	RY1	1A	
D7			
D8	RV1	2B	
D9	RV2	2B	
D10	RV3	2B	
D11	RV4	2C	
D12	RV5	2D	
D13	RV6	2D	
D14	RV7	2E	
D15	RV8	2E	
D17	RV9	2F	
D18	RV10	2F	
D20	RV11	2F	
D21	RV12	2G	
	RV13	2G	
IC1	TP1	2B	
IC2	TP2	2B	
IC3	TP3	2B	
IC4	TP4	2C	
IC5	TP5	2D	
IC6	TP6	2D	
IC7	TP7	2E	
IC8	TP8	2E	
IC9	TP9	2F	
IC10	TP10	2F	
IC11	TP11	2F	
IC12	TP12	2G	
IC13	TP13	2G	
IC14	TP14	3A	
	TP15	3A	
Q1	TP16	1B	
Q2	TP17	2D	
Q3	TP18	1E	
Q4	TP19	1H	
Q5	TP20	1H	
Q6	TP21	2H	
Q7	TP22	4H	
Q8	TP23	2G	
Q9	TP24	2G	
Q10	TP25	1G	
Q11	TP26	1H	
Q12			
Q13			
Q14	TPE1	1B	
Q15	TPE2	1C	
Q16	TPE3	1D	
Q17	TPE4	2D	
Q18	TPE5	1E	
Q19	TPE6	2F	

PS-14 BOARD (1/2)

Series Regulator

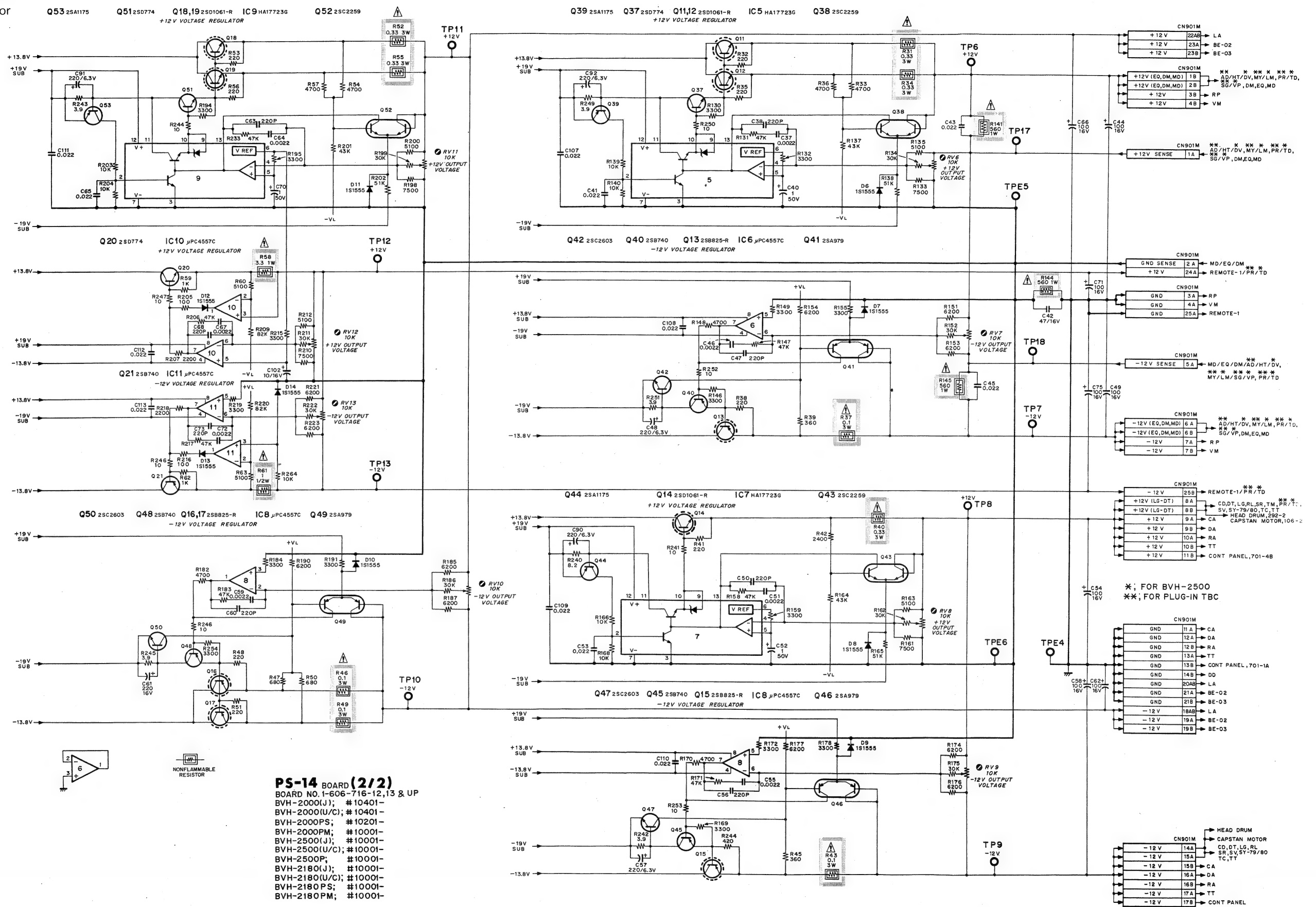
POWER SUPPLY PS-14 (1/2)

PS-14 (1/2) POWER SUPPLY



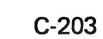
PS-14 BOARD (2/2)

Series Regulator



C-201

C-202



FRAME WIRING (1/2) POWER SUPPLY



C-208

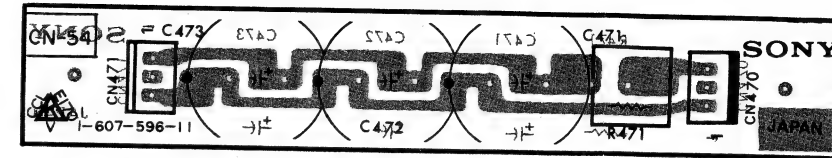
POWER SUPPLY CN-54



CN-54 POWER SUPPLY

CN-54 BOARD (1-607-596-11)

Component Side



1-607-596-11

C-209

C-210

BVH-2500/P

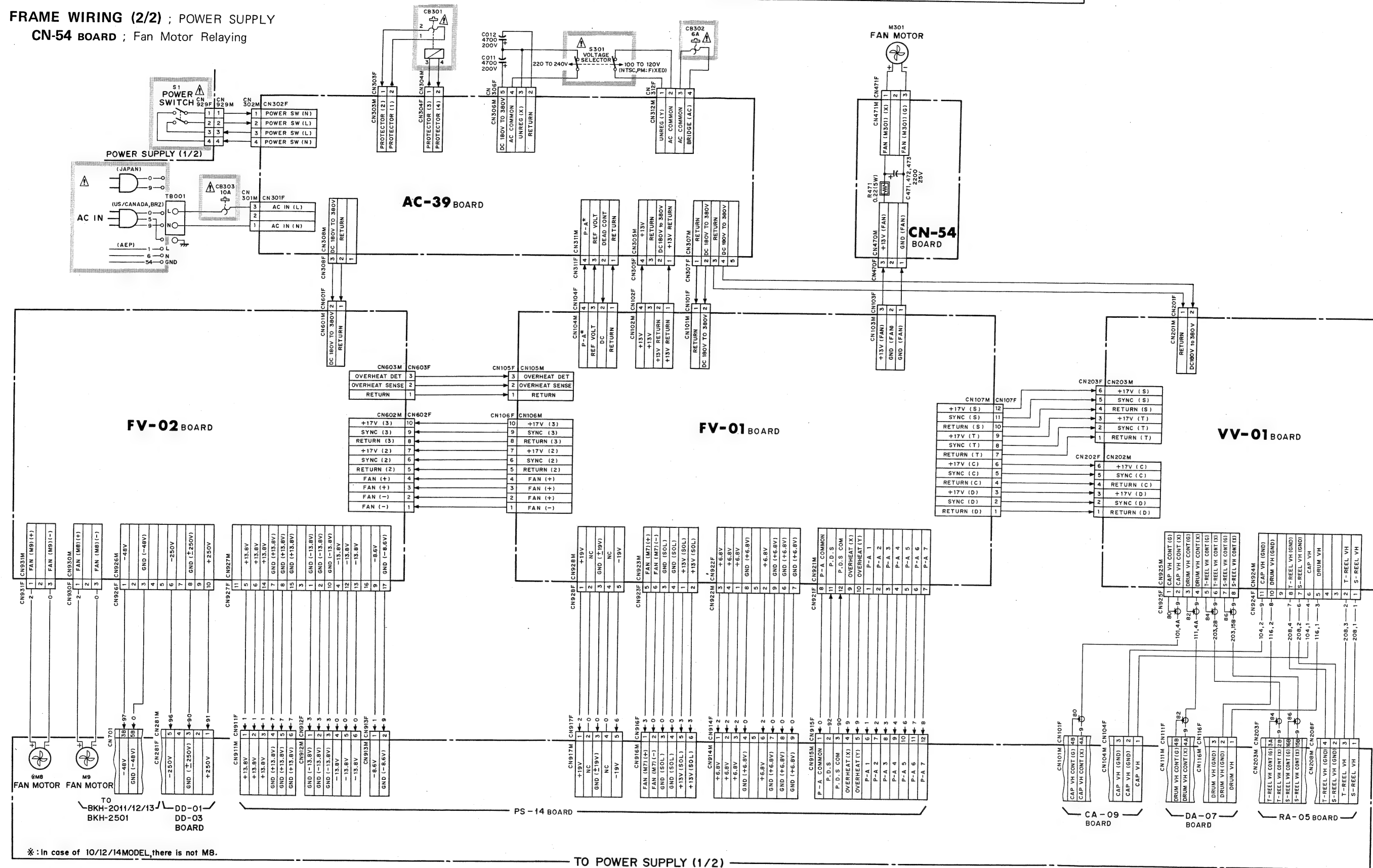
C-239

C-240

BVH-2000/PS/PM
BVH-2180/PS/PM

09 C-210

FRAME WIRING (2/2) ; POWER SUPPLY CN-54 BOARD ; Fan Motor Relaying



*: In case of 10/12/14MODEL, there is not M8.

TO POWER SUPPLY (1/2)

FRAME WIRING POWER SUPPLY (2/2)

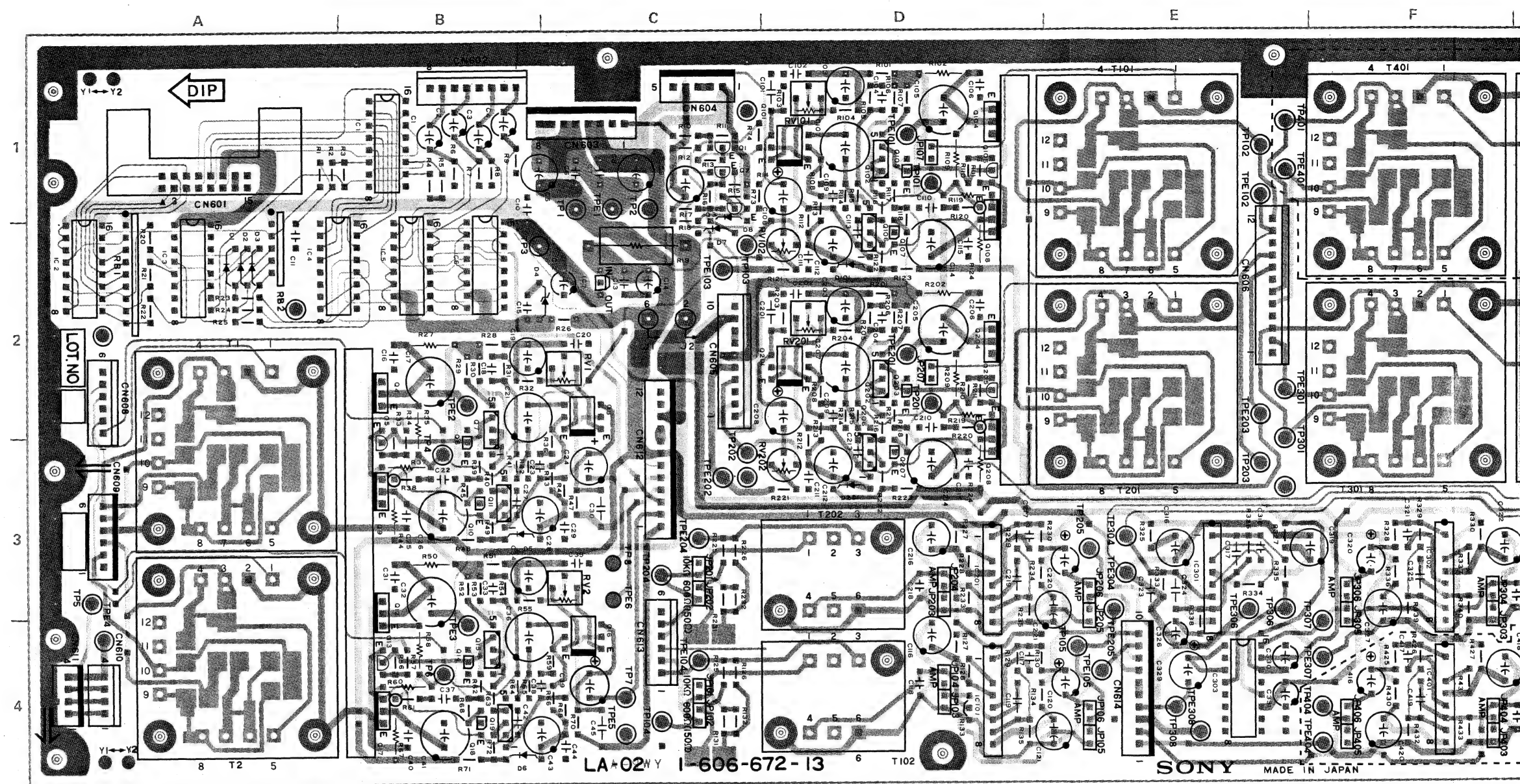
BVH-2000(J); #10001-
BVH-2000(U/C); #10001-
BVH-2000PS; #10001-
BVH-2000PM; #10001-
BVH-2180(J); #10001-
BVH-2180(U/C); #10001-
BVH-2180PS; #10001-
BVH-2180PM; #10001-
BVH-2500(J); #10001-
BVH-2500(U/C); #10001-
BVH-2500PS; #10001-
BVH-2500PM; #10001-



BVH-2000(J);	#10001-	BVH-2180(J);	#10001-	BVH-2500(J);	#10001-
BVH-2000(U/C);	#10001-	BVH-2180(U/C);	#10001-	BVH-2500(U/C);	#10001-
BVH-2000PS;	#10001-	BVH-2180PS;	#10001-	BVH-2500PS;	#10001-
BVH-2000PM;	#10001-	BVH-2180PM;	#10001-		

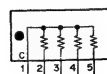
LA-02 BOARD (1-606-672-13)

Component Side



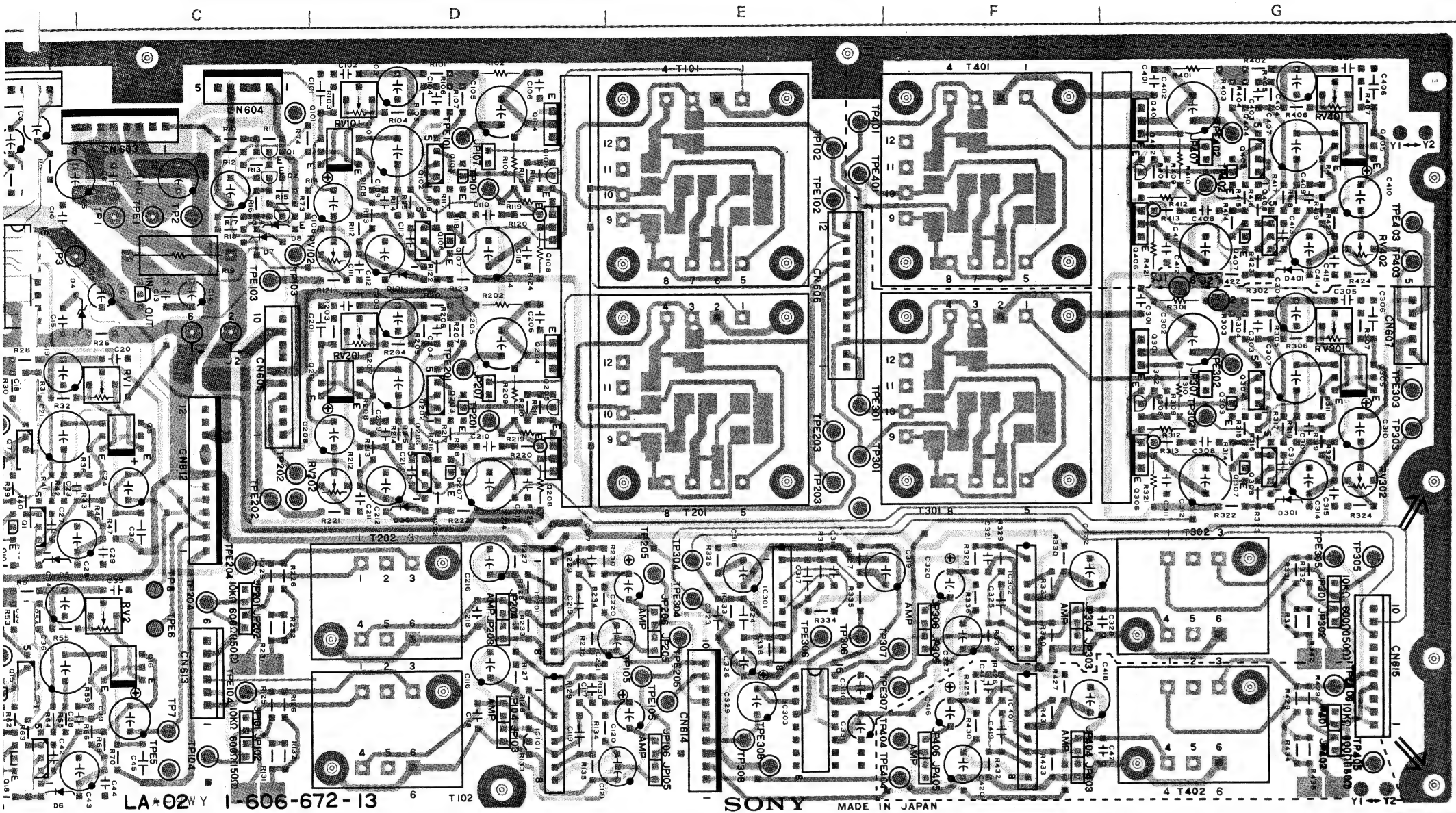
■ 1-606-672-13 COMPONENT SIDE

RB1



C-214

C-215



LA-02 (1-606-672-12 & UP)

BVH-2000/PM

BVH-2000PS
(00/10/02/12 MODEL)BVH-2180/PS/PM
BVH-2500/P

CN601M 1A	Q201	2D
CN602M 1B	Q202	2D
CN603M 1C	Q203	2D
CN604M 1C	Q204	2D
CN605M 2C	Q205	2D
CN606M 2E	Q206	3D
CN607M 2G	Q207	3D
CN608M 3A	Q208	3D
CN609M 3A	Q301	2G
CN610M 4A	Q302	2G
CN611M 4A	Q303	2G
CN612M 3C	Q304	2G
CN613M 4C	Q305	2G
CN614M 4E	Q306	3G
CN615M 4G	Q307	3G
	Q308	3G
D1	2A	
D2	2A	
D3	2A	
D4	2B	
D5	3B	
D6	4B	
D7	2C	
D8	2D	
D101	2D	
D201	3D	
D301	3G	
IC1	1B	
IC2	2A	
IC3	2A	
IC4	2B	
IC5	2B	
IC6	2B	
IC7	2C	
IC101	4D	
IC201	3D	
IC301	3D	
IC302	3F	
IC303	4E	
JP101	4C	
JP102	4C	
JP103	4D	
JP104	4D	
JP105	4E	
JP106	4E	
JP107	1D	
JP201	3C	
JP202	4C	
JP203	4D	
JP204	4D	
JP205	4E	
JP206	3E	
JP207	2D	
JP301	3G	
JP302	3G	
JP303	4F	
JP304	3F	
JP305	4F	
JP306	3F	
JP307	2G	
Q1	1C	
Q2	1C	
Q3	1C	
Q4	2B	
Q5	3B	
Q6	3B	
Q7	3B	
Q8	3C	
Q9	3B	
Q10	3B	
Q11	3B	
Q12	4B	
Q13	4B	
Q14	4B	
Q15	4B	
Q16	4C	
Q17	4B	
Q18	4B	
Q19	4B	
Q101	1D	
Q102	1D	
Q103	1D	
Q104	1D	
Q105	1D	
Q106	2D	
Q107	2D	
Q108	2D	

LA-02 (1-606-672-12 & UP)

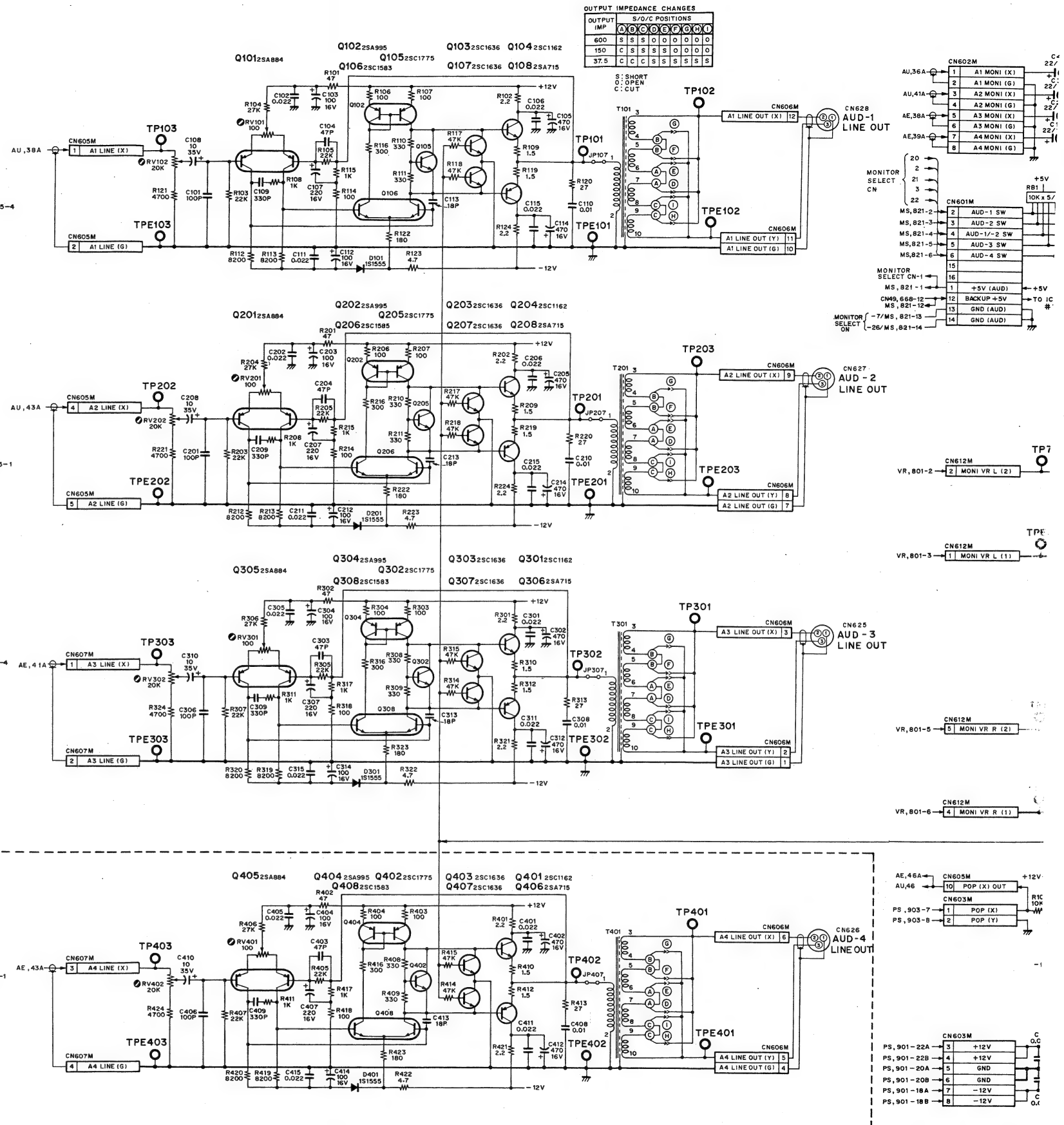
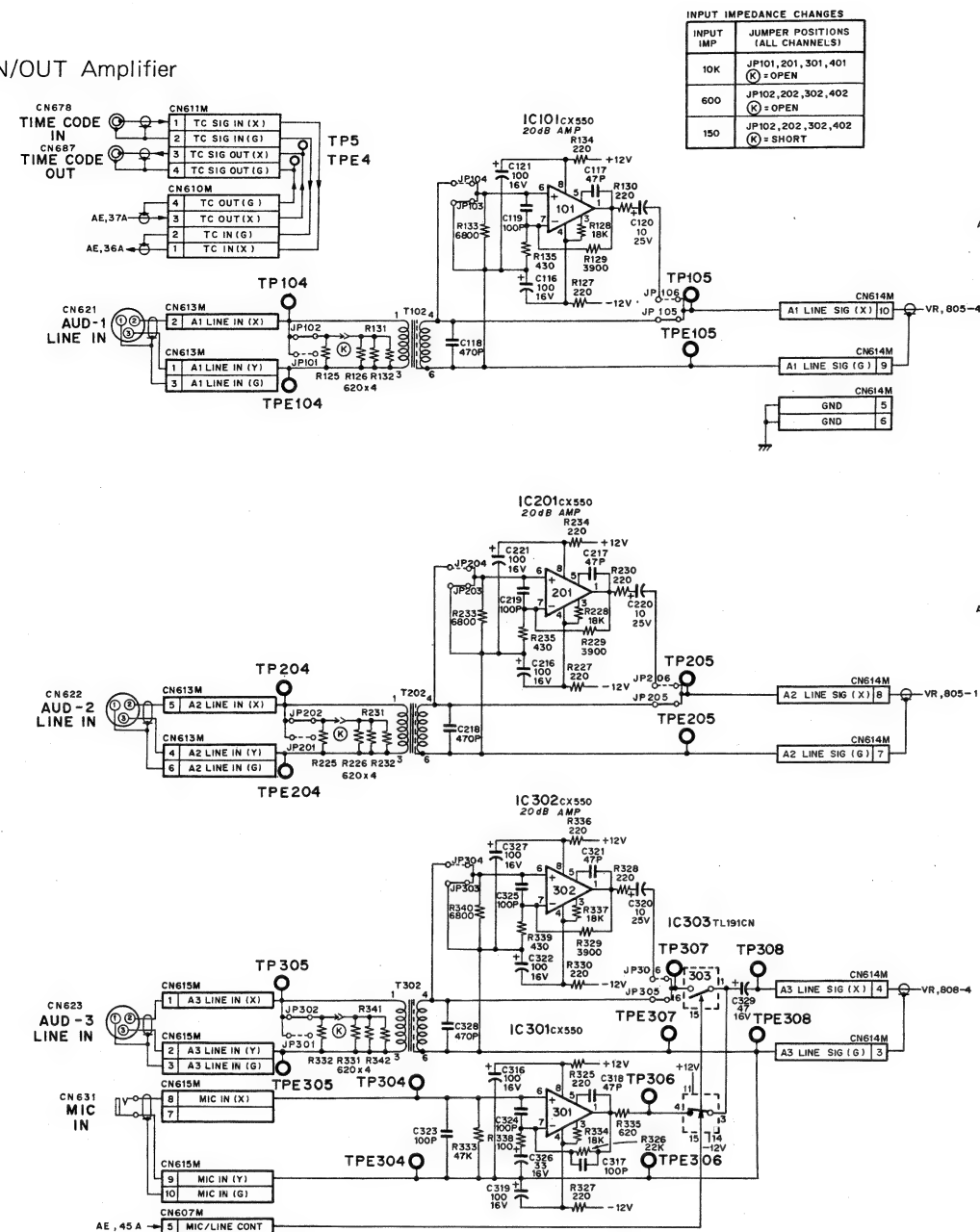
BVH-2000PS
(04/14 MODEL)

CN601M 1A	Q1	1C
CN602M 1B	Q2	1C
CN603M 1C	Q3	1C
CN604M 1C	Q4	2B
CN605M 2C	Q5	3B
CN606M 2E	Q6	3B
CN607M 2G	Q7	3B
CN608M 3A	Q8	3C
CN609M 3A	Q9	3B
CN610M 4A	Q10	3B
CN611M 4A	Q11	3B
CN612M 3C	Q12	4B
CN613M 4C	Q13	4B
CN614M 4E	Q14	4B
CN615M 4G	Q15	4B
	Q16	4C
	Q17	4B
	Q18	4B
	Q19	4B
D1	2A	
D2	2A	
D3	2A	
D4	2B	
D5	3B	
D6	4B	
D7	2C	
D8	2C	
D101	2D	
D201	3D	
D301	3G	
D401	2G	
IC1	1B	
IC2	2A	
IC3	2A	
IC4	2B	
IC5	2B	
IC6	2B	
IC7	2C	
IC101	4D	
IC201	3D	
IC301	3D	
IC302	3F	
IC303	4E	
IC401	4F	
JP101	4C	
JP102	4C	
JP103	4D	
JP104	4D	
JP105	4E	
JP106	4E	
JP107	1D	
JP201	3C	
JP202	4C	
JP203	4D	
JP204	4D	
JP205	4E	
JP206	3E	
JP207	2D	
JP301	3G	
JP302	3G	
JP303	4F	
JP304	3F	
JP305	4F	
JP306	3F	
JP307	2G	
Q1	1C	
Q2	1C	
Q3	1C	
Q4	2B	
Q5	3B	
Q6	3B	
Q7	3B	
Q8	3C	
Q9	3B	
Q10	3B	
Q11	3B	
Q12	4B	
Q13	4B	
Q14	4B	
Q15	4B	
Q16	4C	
Q17	4B	
Q18	4B	
Q19	4B	
Q101	1D	
Q102	1D	
Q103	1D	
Q104	1D	
Q105	1D	
Q106	2D	
Q107	2D	
Q108	2D	

1-606-672-13

LA-02 BOARD

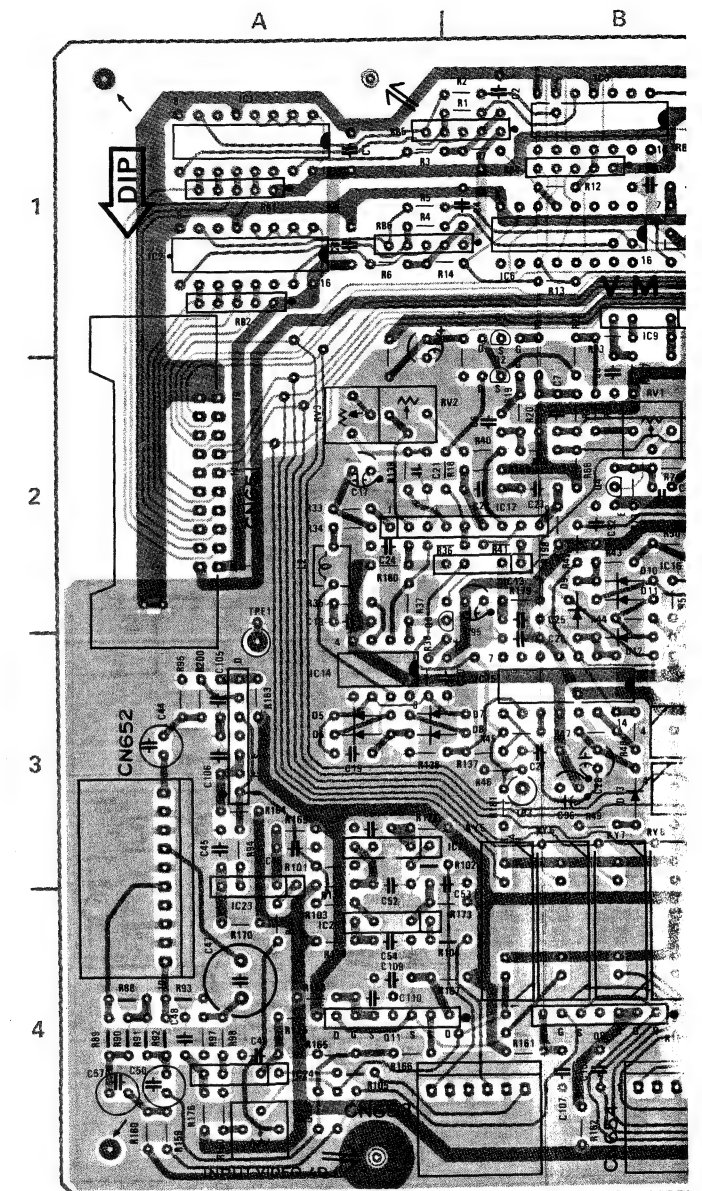
Audio Line IN/OUT Amplifier





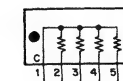
VM-01 BOARD (1-606-658-14)

Component Side



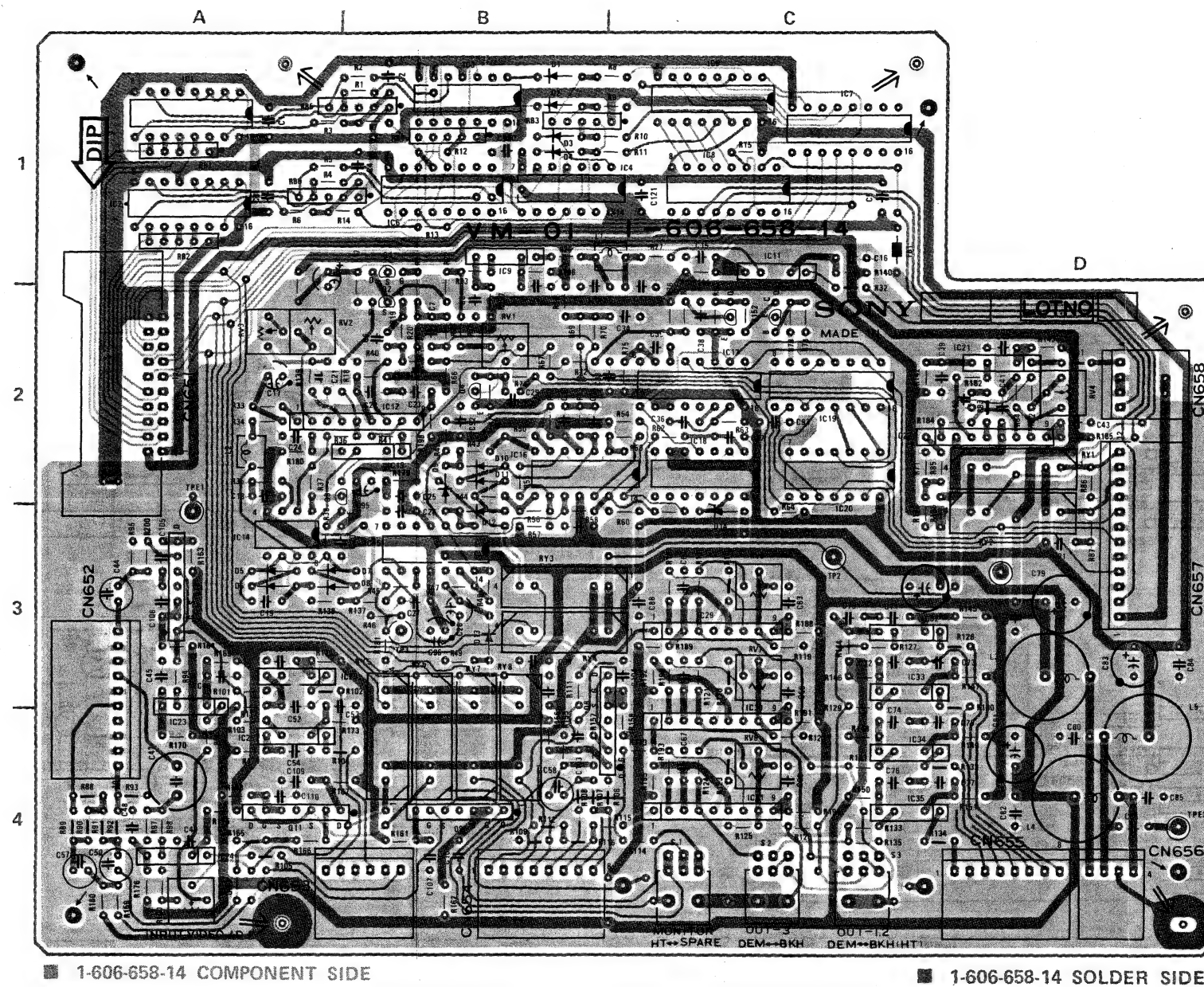
1-606-658-14 COMPONENT SIDE

RB1, 2, 3, 4, 5, 6

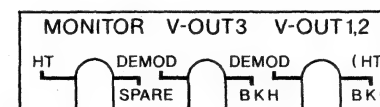
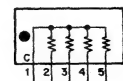


VM-01 BOARD (1-606-658-14)

Component Side



RB1, 2, 3, 4, 5, 6



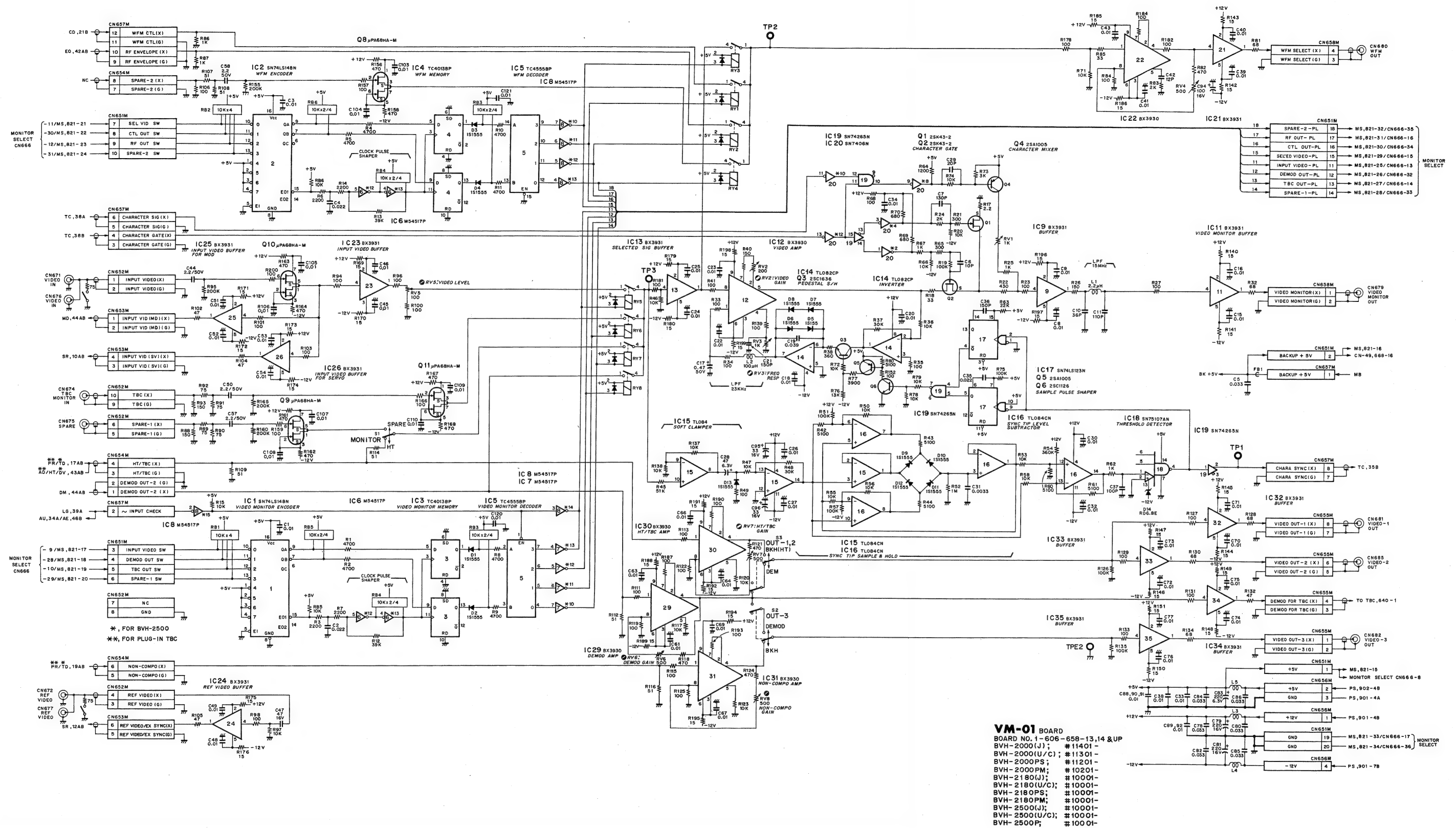
VM-01 (1-606-658-14 & UP)

BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P

CN651M		01	28
2A		02	28
CN652M		03	28
3A		04	28
CN653M		05	2C
4A		06	2C
CN654M		08	4B
4B		09	4B
CN655M		Q10	3A
4D		Q11	4A
CN656M			
4D		RB1	1A
CN657M		RB2	1A
3D		RB3	1B
CN658M		RB4	1B
2D		RB5	1B
		RB6	1A
D1	1B		
D2	1B	RV1	2B
D3	1B	RV2	2A
D4	1B	RV3	2A
D5	3A	RV4	2D
D6	3A	RV5	4A
D7	3A	RV6	3C
D8	3A	RV7	3C
D9	2B	RV8	4C
D10	2B		
D11	2B	RY1	2D
D12	2B	RY2	3D
D13	3B	RY3	3B
D14	3C	RY4	3B
		RY5	4B
IC1	1A	RY6	4B
IC2	1A	RY7	4B
IC3	1B	RY8	4B
IC4	1B		
IC5	1C	S1	4C
IC6	1B	S2	4C
IC7	1C	S3	4C
IC8	1C		
IC9	2B	TP1	3D
IC11	2C	TP2	3C
IC12	2B	TP3	3B
IC13	2B		
IC14	3A	TPE1	3A
IC15	3B	TPE2	4D
IC16	2B		
IC17	2C		
IC18	2C		
IC19	2C		
IC20	2C		
IC21	2D		
IC22	2D		
IC23	4A		
IC24	4A		
IC25	3A		
IC26	4A		
IC29	3C		
IC30	4C		
IC31	4C		
IC32	3C		
IC33	3C		
IC34	4C		
IC35	4C		

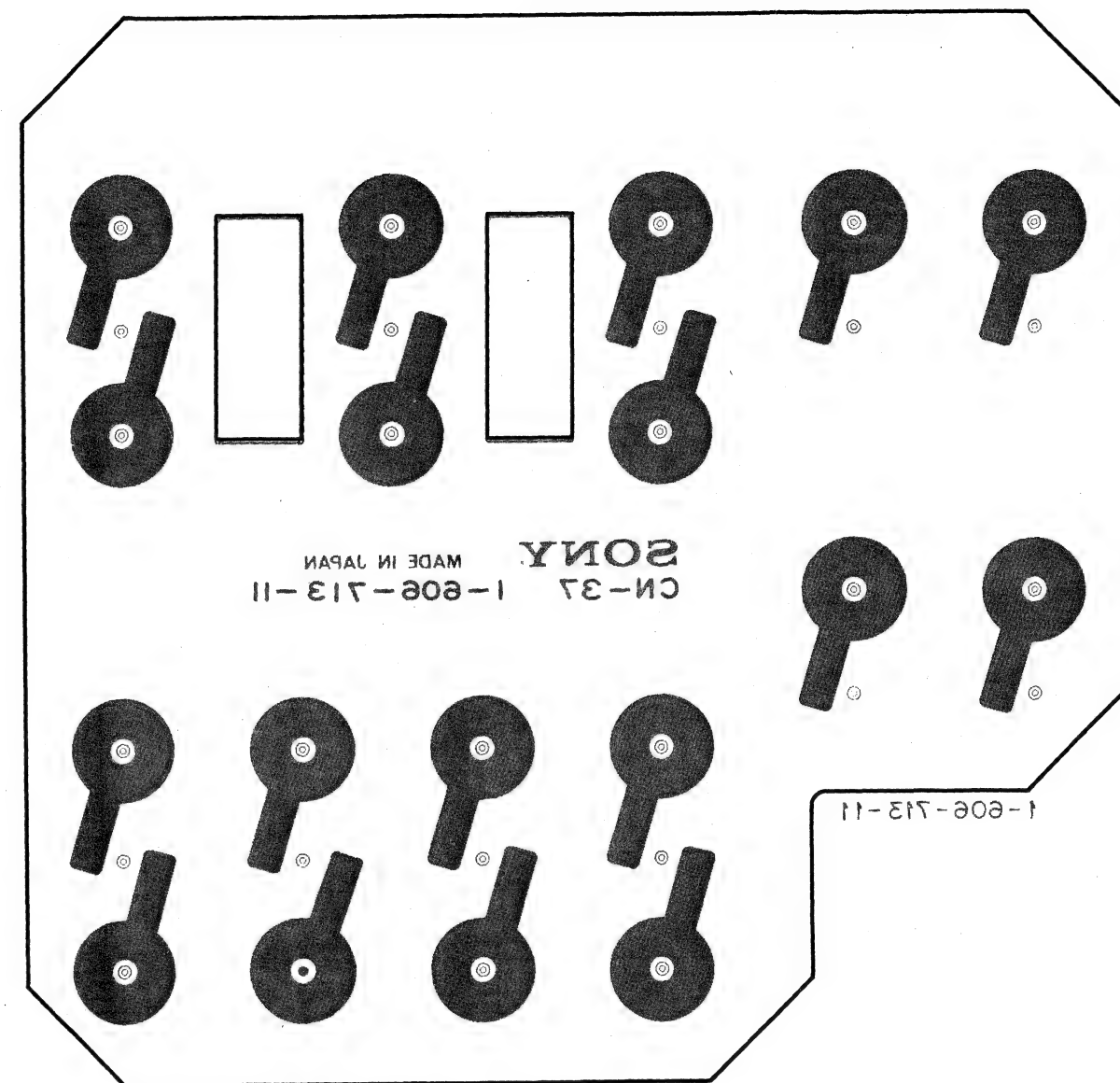
VM-01 BOARD

Video Buffer/Monitor Select

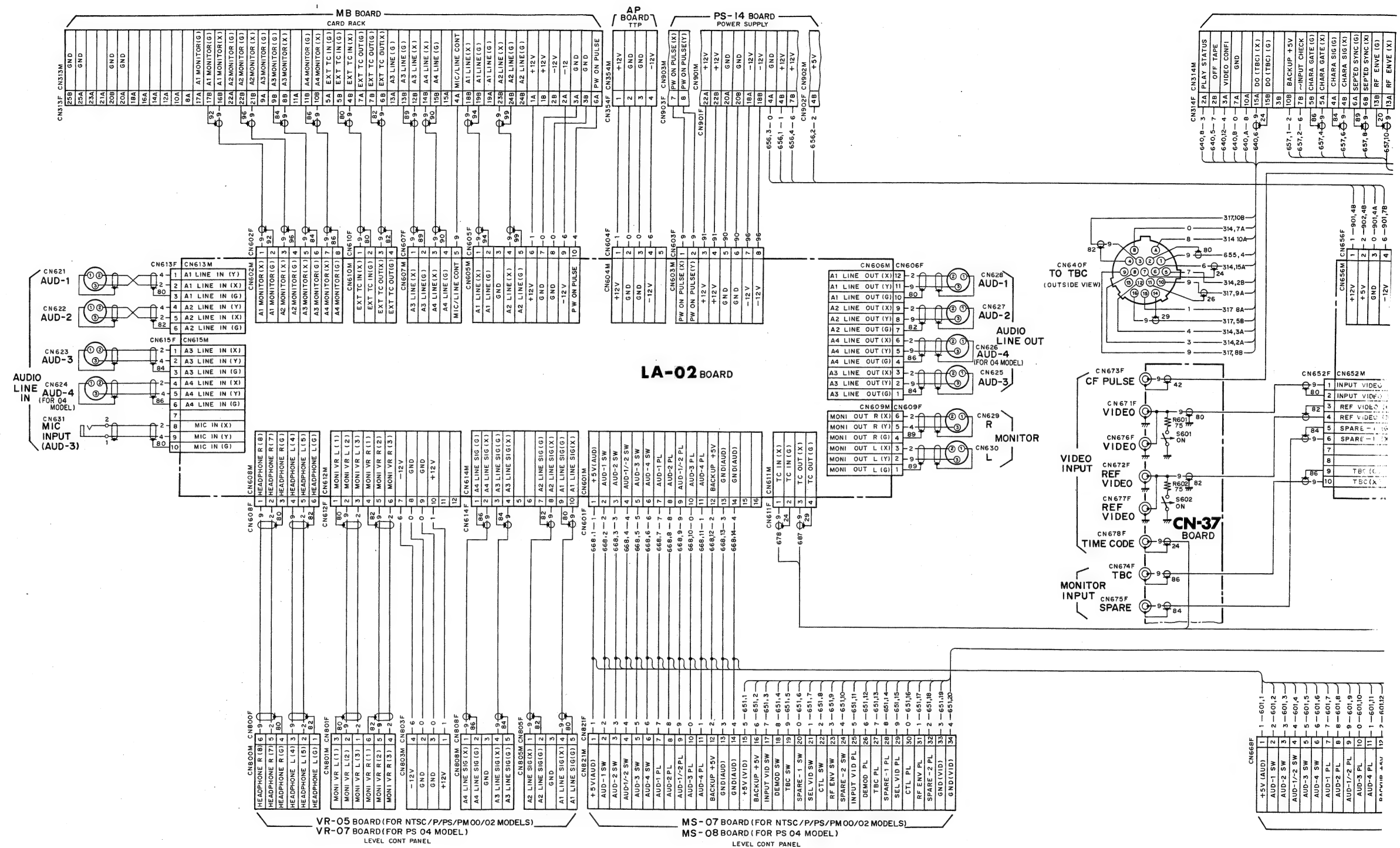




CN-37 BOARD (1-606-713-11)
Component Side



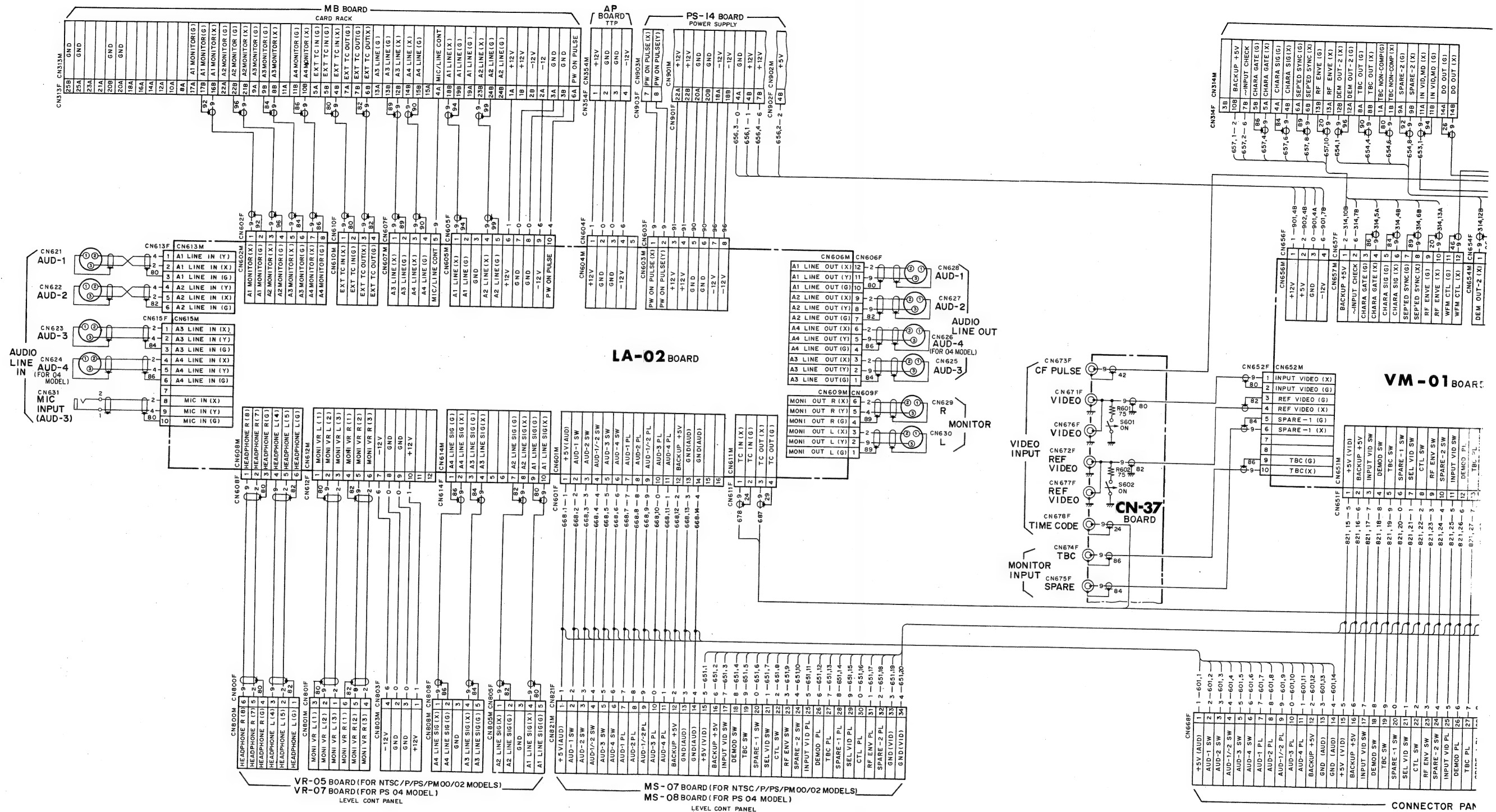
FRAME WIRING – AUDIO/VIDEO ; CONNECTOR PANEL CN-37 BOARD ; Video Connector Panel

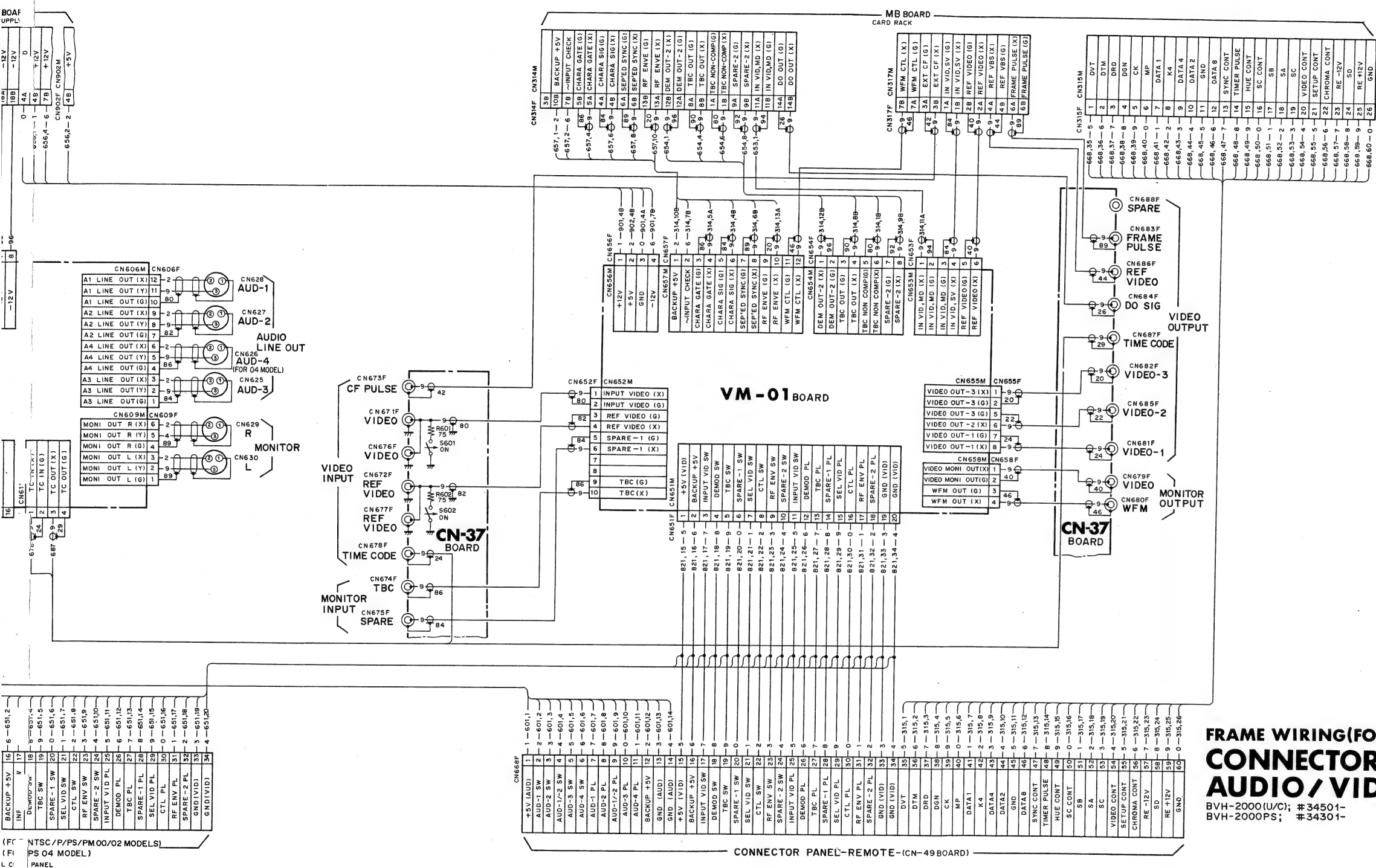




BVH-2000(J); #10001-
 BVH-2000(U/C); #10001-
 BVH-2000PS; #10001-
 BVH-2000PM; #10001-
 BVH-2500(J); #10001-
 BVH-2500(U/C); #10001-
 BVH-2500P; #10001-
 BVH-2180(J); #10001-
 BVH-2180(U/C); #10001-
 BVH-2180PS; #10001-
 BVH-2180PM; #10001-

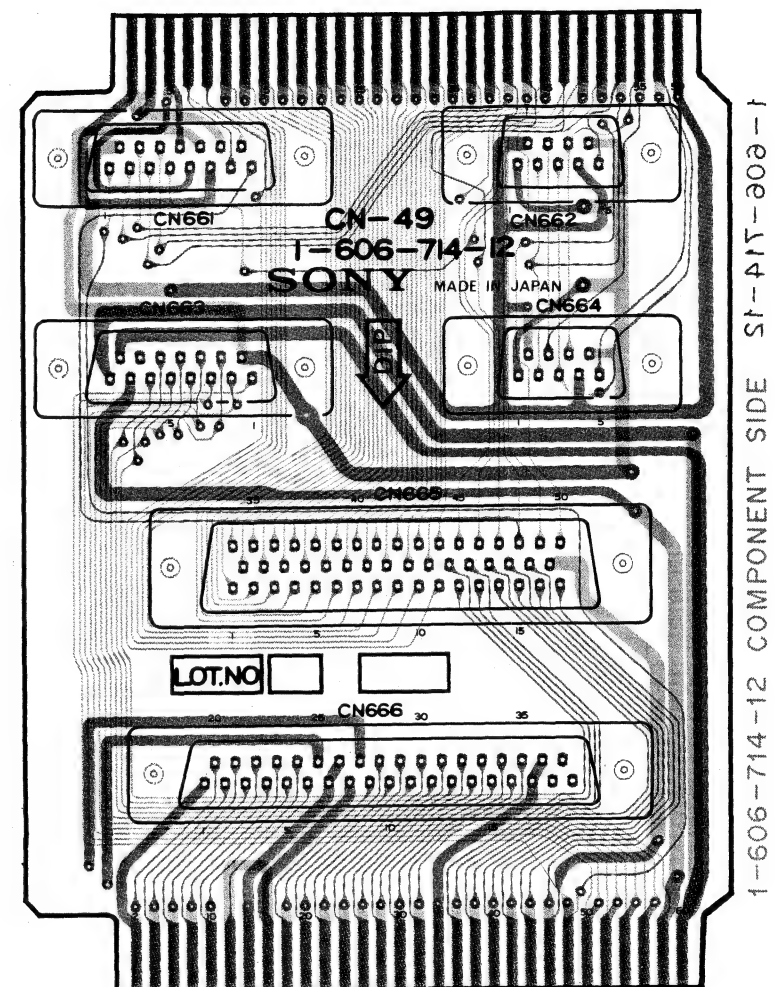
FRAME WIRING – AUDIO/VIDEO ; CONNECTOR PANEL (FOR 10/12/14 MODEL) CN-37 BOARD ; Video Connector Panel







CN-49 BOARD (1-606-714-12)
Component Side



1-606-714-12 COMPONENT SIDE ST-415-303-1

(230)

C-231

C-232

BVH-2500/F

C-260

C-261

C-262

BVH-2000/PS/PM
BVH-2180/PS/PM

C-230

231

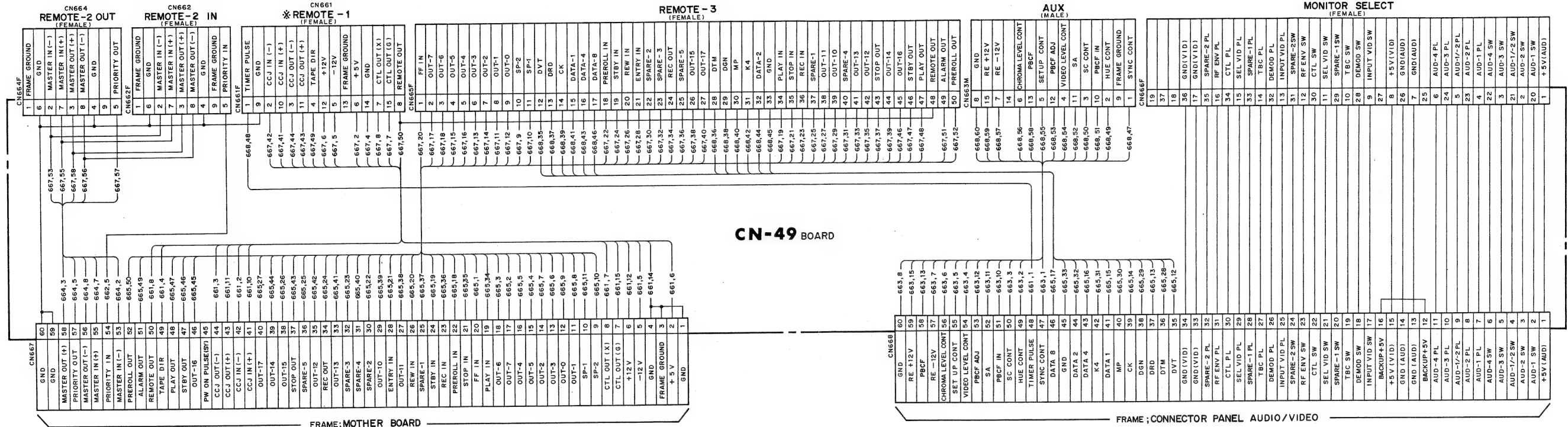
C-232

FRAME WIRING - REMOTE ; CONNECTOR PANEL

CN-49 BOARD; Remote Connector Panel

CONNECTOR PANEL CN-49 FRAME WIRING-REMOTE

FRAME WIRING-REMOTE CN-49 CONNECTOR PANEL





FRAME WIRING
CONNECTOR PANEL-REMOTE
BVH-2000(J); #10001-
BVH-2000(U/C); #10001-
BVH-2000PS; #10001-
BVH-2000PM; #10001-
BVH-2500(J); #10001-
BVH-2500(U/C); #10001-
BVH-2500P; #10001-
BVH-2180(J); #10001-
BVH-2180(U/C); #10001-
BVH-2180PS; #10001-
BVH-2180PM; #10001-

SECTION D

REPLACEABLE PARTS AND OPTIONAL FIXTURE

補修用部品注意事項

(1) 安全重要部品

分解図、電気部品表中、印及びで囲まれた部品は安全性を維持するために重要な部品である。従ってこれらの部品を交換するときには必ず指定の部品と交換すること。

(2) 部品の共通化

ソニーから供給される部品はセットに実装されているものと異なることがある。これは部品の共通化、改良等によるものである。

分解図や電気部品表には現時点での共通化された部品が記載されている。

(3) 部品の変更に関する情報は SECTION E CHANGED PARTS の項を参照のこと。

(4) 部品の在庫

部品表中、() で示されている部品は交換頻度が低い部品であるので在庫していないことがあり、納期が長くなることがある。

(5) コンデンサー、インダクター、抵抗の単位

回路図、分解図、電気部品表中、特に明記したものを除き、下記の単位は省略されている。


コンデンサー ; μF

インダクター ; μH

抵抗 ; Ω

Notes on Repair Parts

(1) Safety Related Components Warning

Components identified by shading marked with  on the exploded views and electrical spare parts list are critical to safe operation. Replace these components with Sony parts whose part numbers appear in this manual or in service bulletins and service manual supplements published by Sony.

(2) Standardization of Parts

Repair parts supplied from Sony Parts Center may not be always identical with the part which actually in use due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts".

This manual's exploded views and electrical spare parts list are indicating the parts numbers of "the standardized genuine parts at present".

(3) Regarding engineering parts changes in our engineering department, refer to SECTION E CHANGED PARTS.

(4) Stock of Parts

Parts marked with () on the spare parts list are not normally required for routine service work. Orders for parts marked with () will be processed, but allow for additional delivery time.

(5) Units for Capacitors, Inductors and Resistors

The following units are assumed in schematic diagrams, electrical parts list and exploded views unless otherwise specified:

Capacitors: μF

Inductors: μH

Resistors: ohm

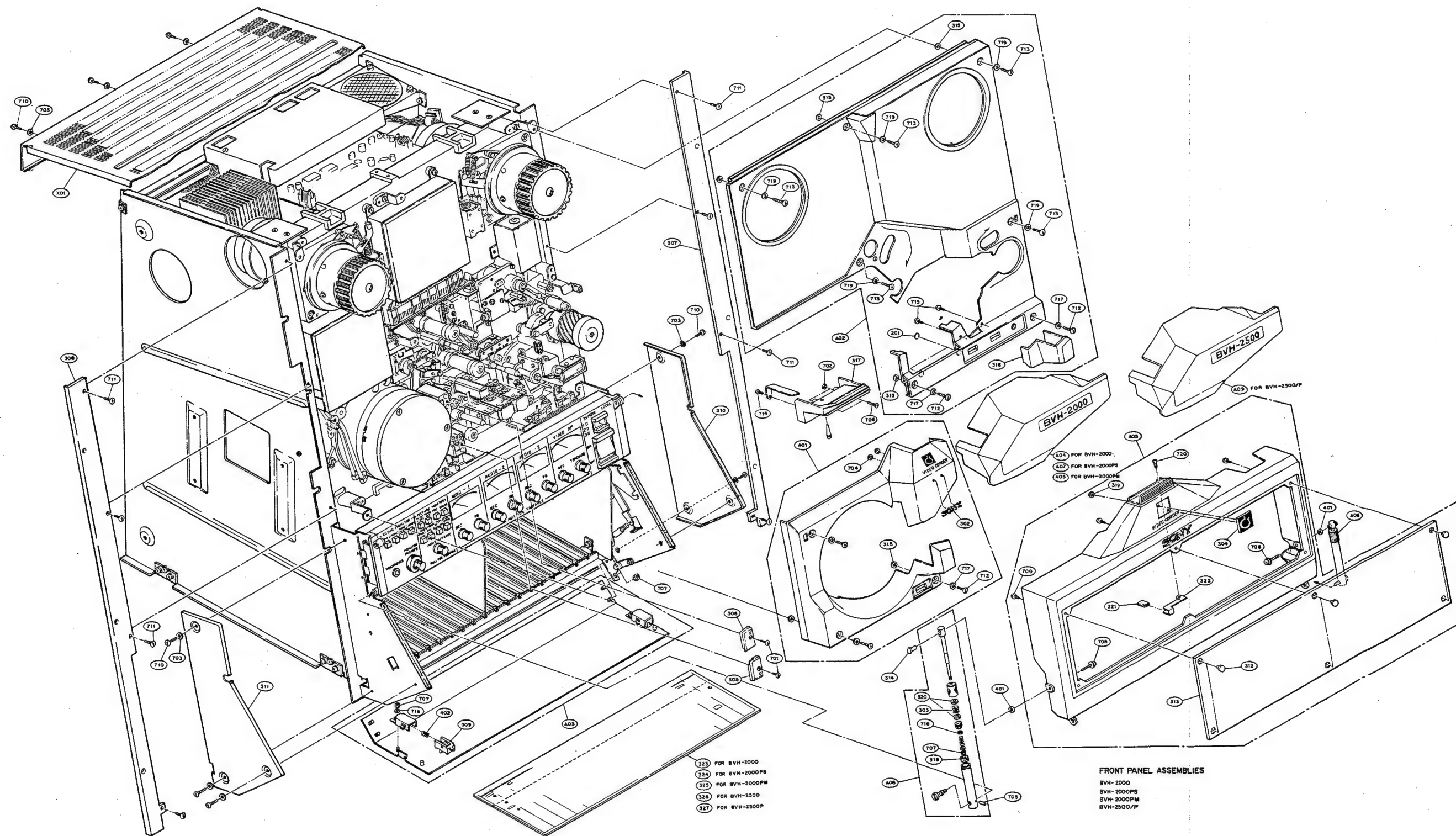
FRONT PANEL ASSY

FRONT PANEL ASSEMBLIES (BVH-2000/2500/2700)

No.	Part No.	Description	No.	Part No.	Description
A01 ()	A-6004-108-A	PANEL ASSY, DRUM	319	3-840-411-00	PUSH NUT 2.4
A02 ()	A-6004-127-C	PANEL ASSY, REEL	320	3-701-441-21	WASHER, M4, POLY
A03 ()	A-6004-110-C	PANEL(1) ASSY, PCB INDICATION	321 ()	3-673-784-00	CAP
A04 ()	A-6004-112-B	COVER ASSY, HEAD (for BVH-2000)	322 ()	3-680-318-00	COVER, STOPPER
()	A-6004-151-A	COVER ASSY(NS), HEAD (for BVH-2000 10, 12)	323	3-680-378-01	LABEL(4), PC BOARD (for BVH-2000)
A05 ()	A-6004-113-B	COVER ASSY (for BVH-2000/PS/PM) (for BVH-2500/P)	324	3-680-379-01	LABEL(5), PC BOARD (for BVH-2000PS)
A06 ()	A-6004-114-C	DAMPER ASSY	325	3-674-694-00	LABEL(3), PC BOARD (for BVH-2000PM)
A07 ()	A-6004-118-A	COVER ASSY, HEAD (for BVH-2000PS)	326	3-680-356-01	LABEL, PC BOARD(1) (for BVH-2500)
()	A-6004-150-A	COVER(PS) ASSY, HEAD (for BVH-2000PS 10, 12, 14)	327	3-680-376-01	LABEL(2), PC BOARD (for BVH-2500P)
A08 ()	A-6004-120-A	COVER ASSY, HEAD (for BVH-2000PM)	328	3-693-018-01	LABEL(HS), PC BOARD (for BVH-2700)
A09 ()	A-6004-128-A	COVER ASSY, HEAD (for BVH-2500)	329 ()	3-673-946-11	GLASS, WINDOW (for BVH-2700)
()	A-6004-138-A	COVER ASSY, HEAD (for BVH-2500P)	401 ()	4-324-412-00	SPACER
A10 ()	A-6004-148-A	COVER ASSY, HEAD (for BVH-2700)	402	4-864-521-00	SPRING COMPRESSION
A11 ()	A-6004-149-A	COVER ASSY (for BVH-2700)	701	7-621-912-30	SCREW, B2.6x6
X01 ()	X-3673-646-3	LID ASSY, UPPER	702	7-623-923-01	WASHER, M2.6, POLY
201	2-523-667-00	CUSHION	703	7-623-954-51	WASHER, M3, FIBER
302 ()	3-566-707-00	EMBLEM, SONY	704	7-624-200-11	PUSH NUT 1.5
303	3-575-368-00	SPRING, COMPRESSION	705	7-626-301-31	SPRING PIN 2x10
304	3-657-977-00	EMBLEM, OMEGA	706	7-682-350-04	SCREW, RK3x12
305 ()	3-673-869-00	COVER(T), GUIDE	707	7-684-023-04	NUT, M3
306 ()	3-673-870-00	COVER(S), GUIDE	708	7-686-531-01	SCREW, PSW3x14
307 ()	3-673-881-00	SASH(RIGHT), ORNAMENTAL	709	7-686-623-04	SCREW, B3x5
308 ()	3-673-882-00	SASH(LEFT), ORNAMENTAL	710	7-686-624-09	SCREW, B3x6
309 ()	3-673-883-00	KNOB LOCK	711	7-686-626-04	SCREW, B3x10
310 ()	3-673-917-00	PLATE(R), ORNAMENTAL	712	7-686-639-04	SCREW, B4x16, WHITE
311 ()	3-673-918-00	PLATE(L), ORNAMENTAL	713	7-686-639-09	SCREW, B4x16, BLACK
312 ()	3-673-944-00	NUT, M3, ORNAMENTAL	714	7-685-133-14	SCREW, BTP2.6x6
313 ()	3-673-946-00	GLASS, WINDOW (for BVH-2000/PS/PM) (for BVH-2500/P)	715	7-687-614-14	SCREW, BTP3x8
314	3-673-965-00	SHAFT, FITTING, DAMPER	716	7-688-003-11	WASHER, M3, MIDDLE
315 ()	3-673-968-00	STOPPER, SCREW	717	7-688-004-13	WASEHR, M4, MIDDLE, WHITE
316 ()	3-673-971-02	COVER, CAPSTAN	718	7-688-004-11	WASHER, M4, MIDDLE
317 ()	3-673-985-00	COVER, FRONT SHIELD	719	7-688-004-12	WASHER, M4, MIDDLE, BLACK
318 ()	3-815-122-00	BUSHING, RUBBER	720	7-682-349-04	SCREW, RK3x10

FRONT PANEL ASSY

FRONT PANEL ASSY



FRONT PANEL ASSY

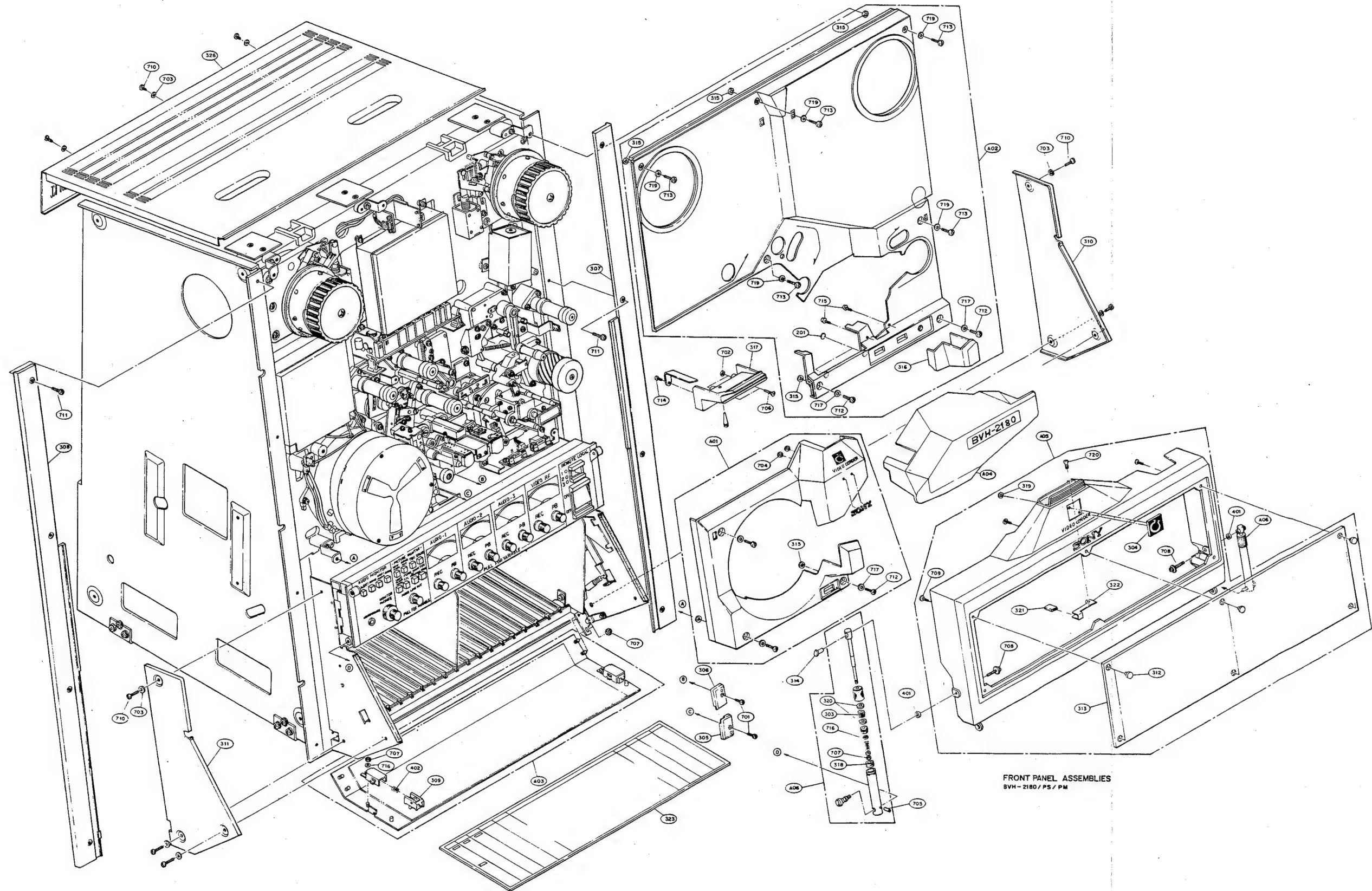
FRONT PANEL ASSEMBLIES (BVH-2180)

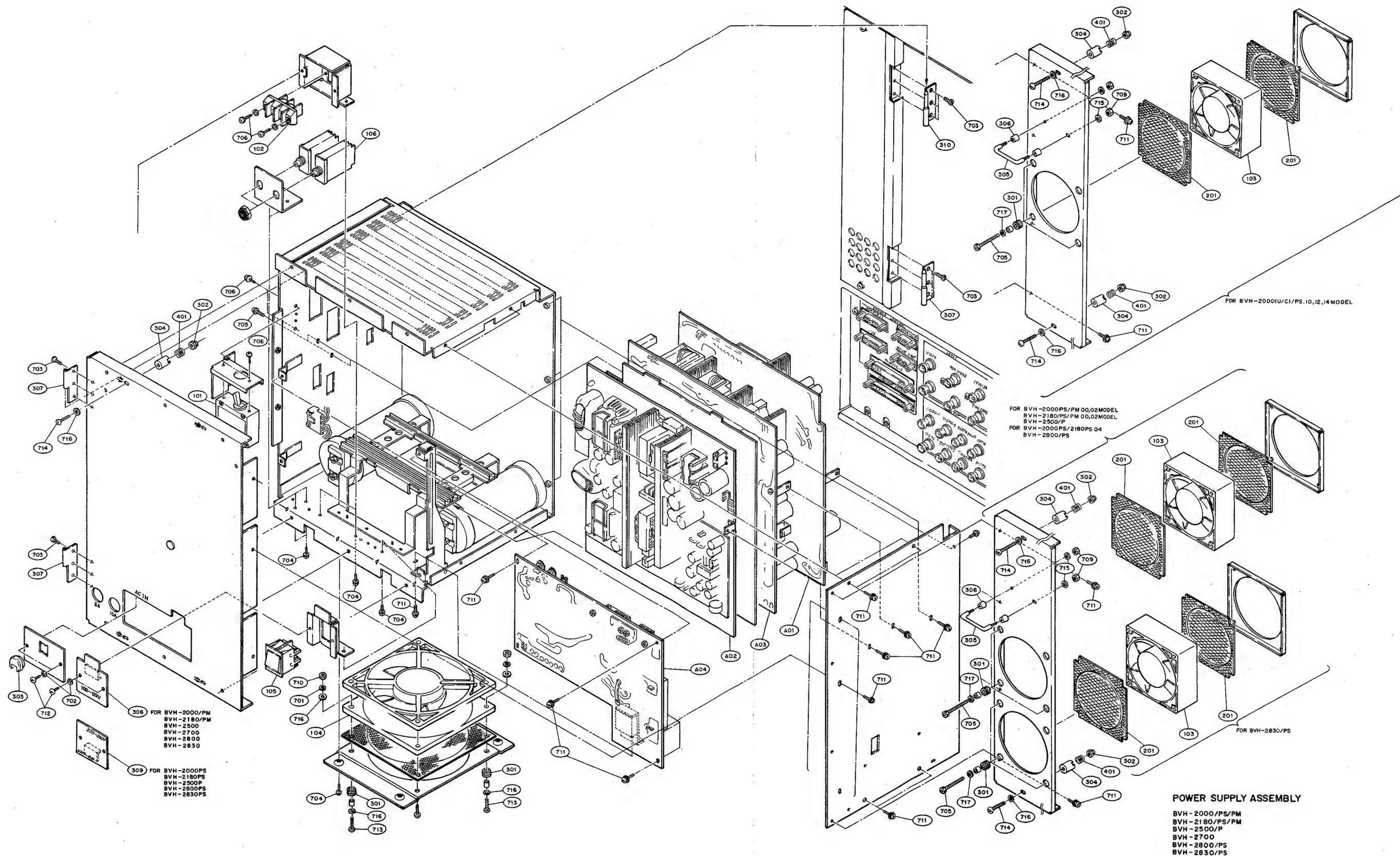
No.	Part No.	Description	No.	Part No.	Description
A01 ()	A-6004-108-A	PANEL ASSY, DRUM	326 ()	3-690-559-01	LID, UPPER
A02 ()	A-6004-146-B	PANEL ASSY, REEL	401 ()	4-324-412-00	SPACER
A03 ()	A-6004-110-C	PANEL(1) ASSY, PCB INDICATION	402	4-864-521-00	SPRING COMPRESSION
A04 ()	A-6004-142-A	COVER ASSY, HEAD (for BVH-2180)	701	7-621-912-30	SCREW, B2.6x6
()	A-6004-143-A	COVER ASSY, HEAD (for BVH-2180PM)	702	7-623-923-01	WASHER, M2.6, POLY
()	A-6004-144-A	COVER ASSY, HEAD (for BVH-2180PS)	703	7-623-954-51	WASHER, M3, FIBER
A05 ()	A-6004-145-A	COVER ASSY	704	7-624-200-11	PUSH NUT 2
A06 ()	A-6004-114-C	DAMPER ASSY	705	7-626-301-31	SPRING PIN 2x10
201	2-523-667-00	CUSHION	706	7-682-350-04	SCREW, RK3x12
303	3-575-368-00	SPRING, COMPRESSION	707	7-684-023-04	NUT, M3
304	3-657-977-00	EMBLEM, OMEGA	708	7-686-531-01	SCREW, PSW3x14
305 ()	3-673-869-00	COVER(T), GUIDE	709	7-686-623-04	SCREW, B3x5
306 ()	3-673-870-00	COVER(S), GUIDE	710	7-686-624-09	SCREW, B3x6
307 ()	3-690-518-01	SASH(RIGHT), ORNAMENTAL	711	7-686-625-04	SCREW, B3x8
308 ()	3-690-519-01	SASH(LEFT), ORNAMENTAL	712	7-686-639-04	SCREW, B4x16, WHITE
309 ()	3-673-883-00	KNOB LOCK	713	7-686-639-09	SCREW, B4x16, BLACK
310 ()	3-673-917-00	PLATE(R), ORNAMENTAL	714	7-687-603-14	SCREW, BTP2.6x6
311 ()	3-673-918-00	PLATE(L), ORNAMENTAL	715	7-687-614-14	SCREW, BTP3x8
312 ()	3-673-944-00	NUT, M3, ORNAMENTAL	716	7-688-003-11	WASHER, M3, MIDDLE
313 ()	3-673-946-00	GLASS, WINDOW	717	7-688-004-11	WASHER, M4, MIDDLE, WHITE
314	3-673-965-00	SHAFT, FITTING, DAMPER	718	7-688-004-11	WASHER, M4, MIDDLE
315 ()	3-673-968-00	STOPPER, SCREW	719	7-688-004-12	WASHER, M4, MIDDLE, BLACK
316 ()	3-673-971-02	COVER, CAPSTAN	720	7-682-349-04	SCREW, RK3x10
317 ()	3-673-985-00	COVER, FRONT SHIELD			
318 ()	3-815-122-00	BUSHING, RUBBER			
319	3-840-411-00	PUSH NUT 2.4			
320	3-701-441-21	WASHER, M4, POLY			
321 ()	3-673-784-00	CAP			
322 ()	3-680-318-00	COVER, STOPPER			
323	3-680-378-01	LABEL(4), PC BOARD (for BVH-2180)			
324	3-680-379-01	LABEL(5), PC BOARD (for BVH-2180PS)			
325	3-674-694-02	LABEL(3), PC BOARD (for BVH-2180PM)			

FRONT PANEL ASSY

FRONT PANEL ASSY

BVH-2180





POWER SUPPLY ASSEMBLY (BVH-2000/2180/2500/2700/2800/2830)

No.	Part No.	Description	No.	Part No.	Description
A01	() A-4925-002-B	COMPLETE PCB, FV-01	705	7-682-570-09	SCREW, B4x40
A02	() A-4925-004-B	COMPLETE PCB, FV-02	706	7-682-648-01	SCREW, +PS3x8
A03	() A-4925-003-B	COMPLETE PCB, VV-01	707	7-682-651-01	SCREW, PS3x14
A04	() A-4925-001-A	COMPLETE PCB, AC-39	708	7-682-948-01	SCREW, +PSW3x8
101	1-532-653-00	CIRCUIT PROTECTOR, 50mA/65V	709	7-684-023-04	NUT, M3
102	() 1-536-712-00	TERMINAL BOARD, 2P	710	7-684-024-04	NUT, M4
103	1-541-327-11	FAN, DC 12V	711	7-686-528-01	SCREW, PSW3x8
104	1-541-203-00	FAN, DC 12V	712	7-686-625-09	SCREW, B3x8
105	1-554-145-00	SWITCH, ROCKER	713	7-686-639-04	SCREW, B4x16
106	1-532-655-00	CIRCUIT BREAKER	714	7-686-640-09	SCREW, B4x20
201	() 2-252-609-00	COVER, FAN	715	7-688-003-11	WASHER, M3, MIDDLE
301	() 3-630-837-00	BUSHING	716	7-688-004-12	WASHER, M4, MIDDLE, BLACK
302	() 3-680-316-00	NUT, M4, NYLON	717	7-688-005-02	WASHER, M5, SMALL, BLACK
303	3-649-728-00	STOPPER, CORD			
304	() 3-651-849-00	SPACER, PANEL			
305	() 3-657-653-00	ARM, GUARD			
306	() 3-657-654-00	RING, ORNAMENTAL			
307	() 3-673-774-00	HINGE			
308	() 3-674-641-00	COVER, VS (for BVH-2000/PM) (for BVH-2180/PM) (for BVH-2500) (for BVH-2700) (for BVH-2800) (for BVH-2830)			
309	() 3-674-642-00	COVER, VS (for BVH-2000PS) (for BVH-2180PS) (for BVH-2500P) (for BVH-2800PS) (for BVH-2830PS)			
310	() 3-673-774-11	HINGE			
401	() 3-303-890-01	SPRING, COMPRESSION			
701	7-623-210-22	SPRING WASHER, M4			
702	7-623-954-51	WASHER, M3, FIBER			
703	7-686-624-09	SCREW, B3x6			
704	7-682-547-09	SCREW, +B3x6			

CONNECTOR PANEL ASSY

CONNECTOR PANEL ASSEMBLY (BVH-2000/2180/2500)

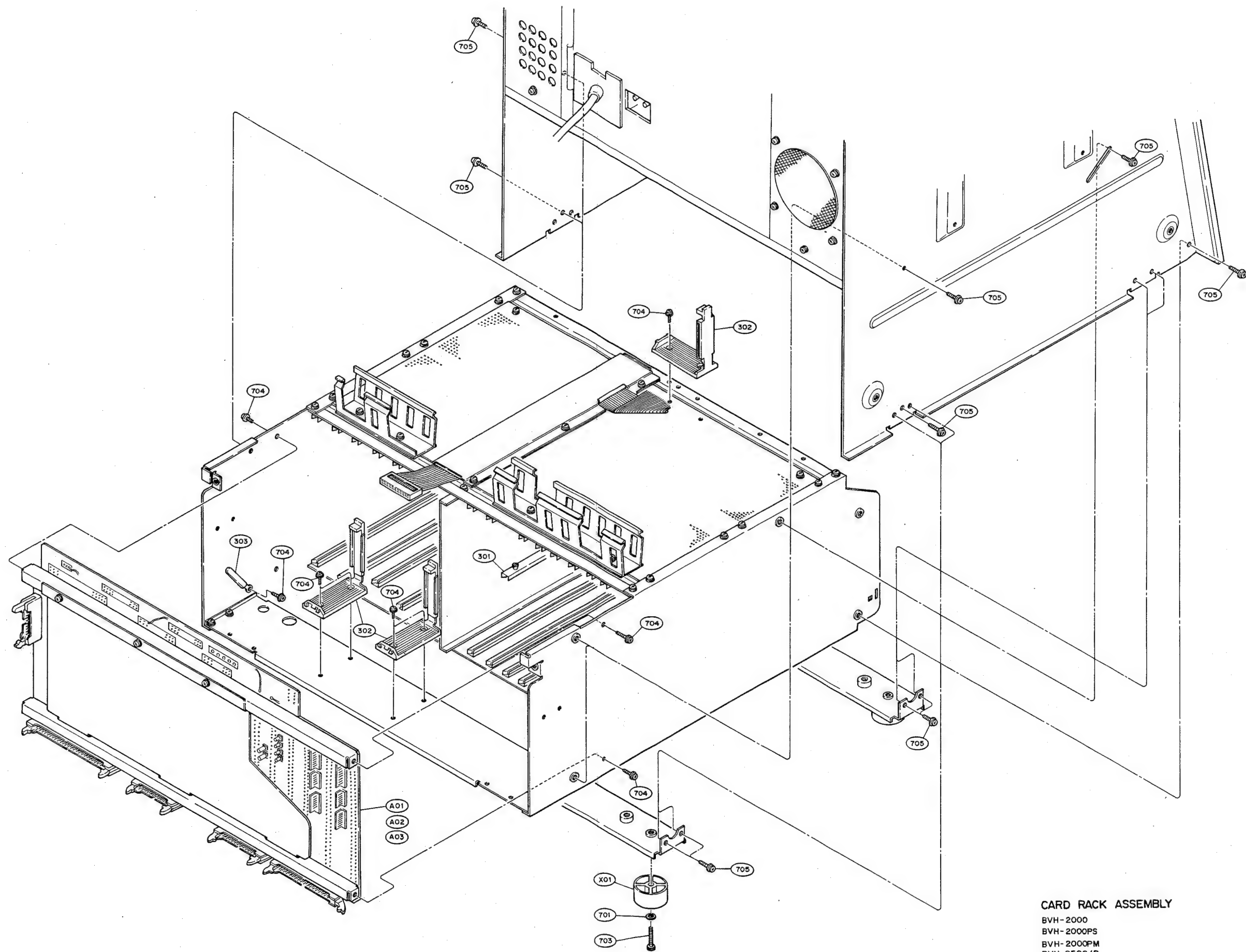
No.	Part No.	Description	No.	Part No.	Description
A01 ()	A-6011-062-A	COMPLETE PCB, VM-01	703	7-621-912-38	SCREW, B2.6x6
A02 ()	A-6013-043-A	COMPLETE PCB, LA-02 (for BVH-2000/PS/PM 00,02) (for BVH-2180/PS/PM 00,02) (for BVH-2500/P)	704	7-682-247-09	SCREW, K3x6
A03 ()	A-6025-082-A	COMPLETE PCB, CN-49 (for NTSC, PS, PM, 00,02,04 MODEL)	705	7-684-023-04	NUT, M3
A04 ()	A-6013-057-A	COMPLETE PCB, LA-02 (for BVH-2000PS/2180PS 04)	706	7-686-527-01	SCREW, PSW3x6
A05 ()	A-6025-095-A	COMPLETE PCB, CN-49 (for 10,12,14 MODEL)	707	7-686-625-09	SCREW, B3x8
101	1-507-552-21	JACK, PHONE	708	7-686-640-09	SCREW, B4x20
102	1-509-176-51	RECEPTACLE 3P, MALE	709	7-688-004-12	WASHER, M4, MIDDLE, BLACK
103	1-509-184-51	RECEPTACLE 3P, FEMALE			
104	1-509-471-00	RECEP., 18P, FEMALE			
105	1-552-078-00	SWITCH, SLIDE			
106	1-560-769-00	RECEP., D-SUB, 15-PIN, MALE			
107	1-561-655-00	RECEP., D-SUB, 9-PIN, FEMALE			
108	1-561-781-21	RECEP., BNC			
109	1-561-897-00	RECEP., D-SUB, 15-PIN, FEMALE			
110	1-561-898-00	RECEP., D-SUB, 37-PIN, FEMALE			
111	1-561-899-00	RECEP., D-SUB, 50-PIN, FEMALE			
112 ()	1-606-713-00	CN-37 BOARD (WITHOUT COMPONENT)			
201	2-090-229-00	NUT, PLATE (for NTSC, PS, PM, 00,02,04 MODEL)			
301	3-680-316-00	NUT, M4, NYLON			
302 ()	3-651-849-00	SPACER, PANEL			
303	3-651-875-00	HINGE, FRONT			
304 ()	3-673-859-04	LABEL, CONNECTOR (FOR BVH-2000/PS/PM 00,02) (BVH-2180/PS/PM 00,02) (BVH-2500/P) (FOR BVH-2000PS/2180PS 04)			
305 ()	3-673-910-00	SCREW, CONNECTOR			
306 ()	3-701-822-00	HOLDER, WIRE			
307 ()	3-703-150-11	CLAMP			
308 ()	3-693-059-02	LABEL(NS) CONNECTOR (for BVH-2000(U/C)PS 10,12,14)			
401	4-812-134-11	RIVET, NYLON			
402 ()	3-303-890-01	SPRING, COMPRESSION			
701	7-621-559-20	SCREW, K2.6x4			
702	7-621-559-30	SCREW, K2.6x5			

CONNECTOR PANEL ASSY



CARD RACK ASSY

CARD RACK ASSY



D-11

CARD RACK ASSEMBLY

BVH-2000
BVH-2000PS
BVH-2000PM
BVH-2500/P

D-12

BVH-2000/2500
(J, U/C, PS, PM)

CARD RACK ASSY

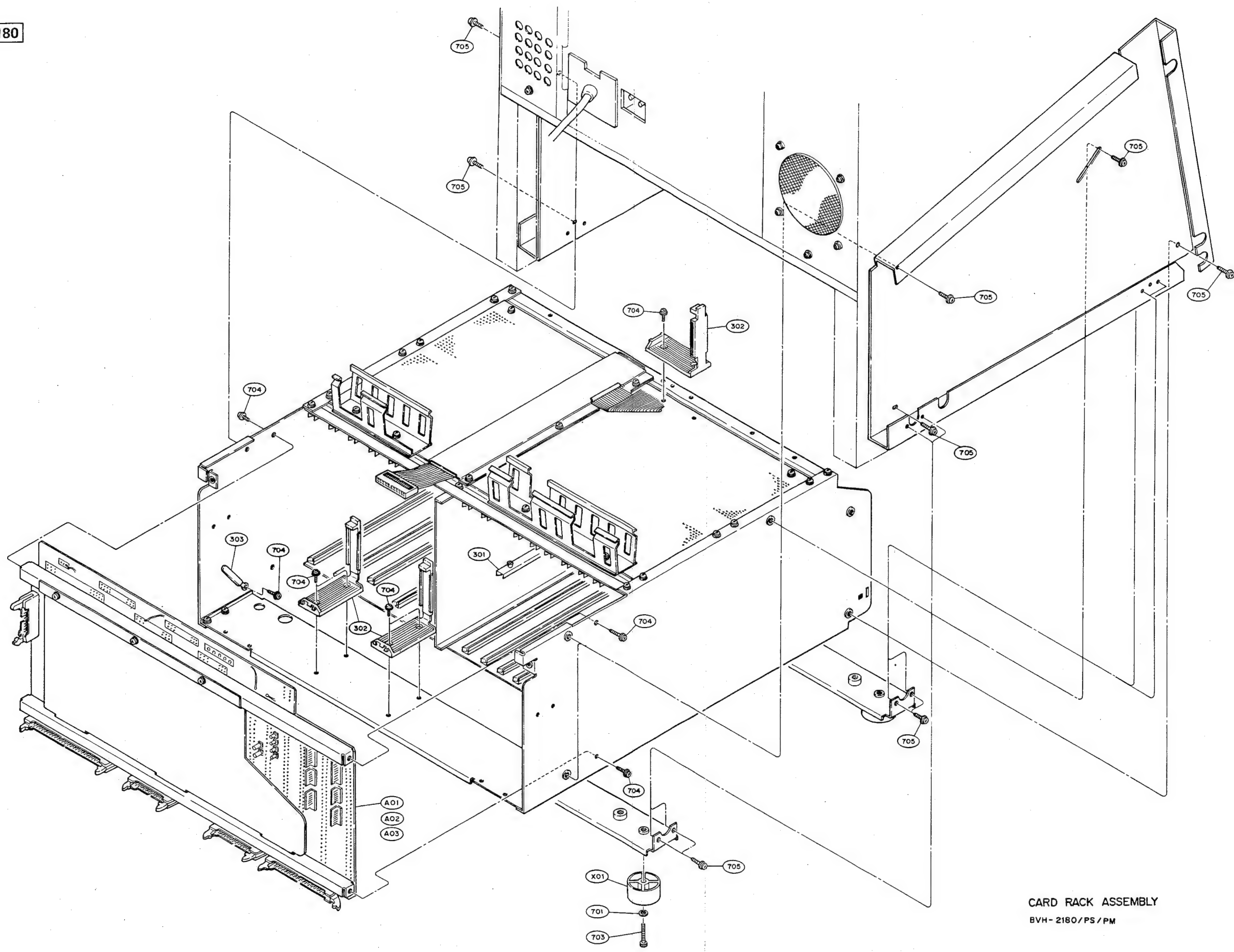
CARD RACK ASSEMBLY (BVH-2000/2180/2500/2700)

No.	Part No.	Description
A01 ()	A-6025-092-A	COMPLETE PCB,MB-14A (for BVH-2000/PS/PM) (for BVH-2180/PS/PM)
A02 ()	A-6025-088-A	COMPLETE PCB,MB-60 (for BVH-2500/P)
A03 ()	A-6025-094-A	COMPLETE PCB,MB-74 (for BVH-2700)
X01	X-4836-202-X	FOOT ASSY
301 ()	3-673-676-31	RAIL,PC BOARD GUIDE
302	3-673-796-02	CLAMP,FLAT CABLE
303 ()	3-701-822-00	HOLDER,WIRE
701	7-623-210-22	SPRING WASHER,M4
703	7-683-425-04	SCREW,C4x20
704	7-686-527-01	SCREW,PSW3x6
705	7-686-548-01	SCREW,PSW4x8

CARD RACK ASSY

CARD RACK ASSY

BVH-2180



D-11(a)

CARD RACK ASSEMBLY
BVH- 2180/PS/PM

D-12(a)

CARD RACK ASSEMBLY (BVH-2000/2180/2500/2700)

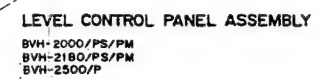
No.	Part No.	Description
A01 ()	A-6025-092-A	COMPLETE PCB,MB-14A (for BVH-2000/PS/PM) (for BVH-2180/PS/PM)
A02 ()	A-6025-088-A	COMPLETE PCB,MB-60 (for BVH-2500/P)
A03 ()	A-6025-094-A	COMPLETE PCB,MB-74 (for BVH-2700)
X01	X-4836-202-X	FOOT ASSY
301 ()	3-673-676-31	RAIL,PC BOARD GUIDE
302	3-673-796-02	CLAMP,FLAT CABLE
303 ()	3-701-822-00	HOLDER,WIRE
701	7-623-210-22	SPRING WASHER,M4
703	7-683-425-04	SCREW,C4x20
704	7-686-527-01	SCREW,PSW3x6
705	7-686-548-01	SCREW,PSW4x8

LEVEL CONTROL PANEL

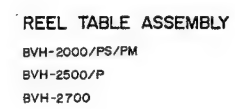
LEVEL CONTROL PANEL ASSEMBLY (BVH-2000/2180/2500)

No.	Part No.	Description	No.	Part No.	Description
A01 ()	A-6013-042-A	COMPLETE PCB,VR-05 (for BVH-2000/PS/PM 00,02) (for BVH-2180/PS/PM 00,02) (for BVH-2500/P)	305	3-688-028-00	KNOB(SMALL),LEVER SWITCH
A02 ()	A-6013-056-A	COMPLETE PCB,VR-07 (for BVH-2000PS/2180PS 04)	306 ()	3-673-653-00	MIRROR
X01	X-3668-056-0	KNOB(W) ASSY,CONTROL	307 ()	3-673-769-00	GUARD,SWITCH
X02	X-3673-635-0	KNOB(1) ASSY,CONTROL	308 ()	3-673-784-00	CAP
X03 ()	X-3673-638-0	SASH(RIGHT) ASSY,METER	309 ()	3-673-813-00	HOLDER,METER
X04 ()	X-3673-639-0	SASH(LEFT) ASSY,METER	310 ()	3-673-842-00	GUARD,POWER SWITCH
X05	X-3673-650-0	KNOB(2) ASSY,CONTROL	311 ()	3-673-886-00	PANEL,METER (for BVH-2000/PS/PM 00,02) (for BVH-2180/PS/PM 00,02) (for BVH-2500/P)
X06 ()	X-3673-657-0	SUPPORT(RIGHT) ASSY,ROLLER	312 ()	3-673-922-00	HINGE
X07 ()	X-3673-658-0	SUPPORT(RIGHT) ASSY,STAY	313 ()	3-673-957-00	PIN,HINGE
X08 ()	X-3673-659-0	SUPPORT(LEFT) ASSY,ROLLER	314 ()	3-674-658-00	PANEL,METER (for BVH-2000PS/2180PS 04)
X09 ()	X-3673-660-0	SUPPORT(LEFT) ASSY,STAY	315 ()	3-674-691-00	COVER,LED
X10 ()	X-3673-661-0	ARM(RIGHT) ASSY,CAM	701	7-624-105-04	STOP RING,E2.3
X11 ()	X-3673-662-0	ARM(LEFT) ASSY,CAM	702	7-624-106-04	STOP RING,E3
X12 ()	X-3673-663-0	SUPPORT(RIGHT) ASSY,PANEL	703	7-682-247-09	SCREW,K3x6
X13 ()	X-3673-664-0	SUPPORT(LEFT) ASSY,PANEL	704	7-684-023-04	NUT,M3
X14 ()	X-3673-667-0	HINGE,MAIN,RIGHT ASSY	705	7-685-233-14	SCREW,K2.6x6
X15 ()	X-3673-668-0	HINGE,MAIN,LEFT ASSY	706	7-686-450-01	SCREW,PS3x12
101	1-520-450-12	METER,VU	707	7-686-527-01	SCREW,PSW3x6
102	1-520-451-12	METER,VIDEO/RF	708	7-686-528-01	SCREW,PSW3x8
103	1-554-066-00	SWITCH,ROCKER			
104 ()	1-606-709-00	MS-07 BOARD (WITHOUT COMPONENT, for BVH-2000/PS/PM 00,02 for BVH-2180/PS/PM 00,02 for BVH-2500/P)			
105 ()	1-606-711-00	ML-02 BOARD (WITHOUT COMPONENT, for BVH-2000/PS/PM 00,02 for BVH-2180/PS/PM 00,02 for BVH-2500/P)			
106 ()	1-606-710-00	MS-08 BOARD (WITHOUT COMPONENT, for BVH-2000PS/2180PS 04)			
107 ()	1-606-712-00	ML-03 BOARD (WITHOUT COMPONENT, for BVH-2000PS/2180PS 04)			
201 ()	2-252-615-00	CUSHION,SWITCH			
202 ()	2-252-623-02	PLATE,SWITCH,LEVER			
301	3-483-026-00	BRACKET,MOTOR THRUST			
302 ()	3-483-026-31	BRACKET,MOTER THRUST			
303	3-643-383-00	COVER,LAMP			
304	3-644-718-00	SPRING COMPRESSION			

LEVEL CONTROL PANEL



REEL TABLE ASSY



REEL TABLE

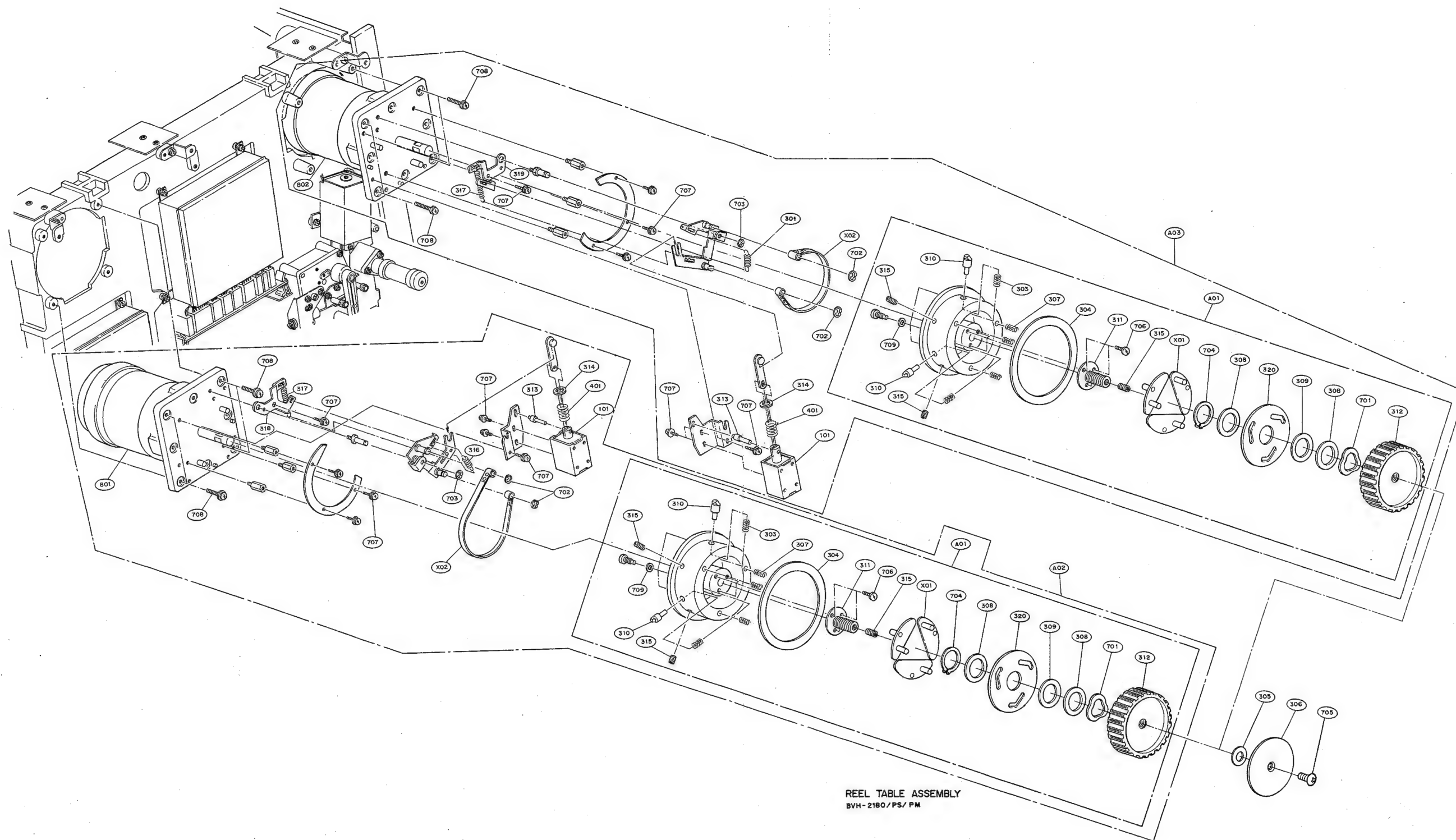
REEL TABLE ASSEMBLY (BVH-2000/2500/2700)

No.	Part No.	Description
A01 ()	A-6039-016-B	TABLE ASSY, REEL
A02	A-6039-020-A	MOTOR ASSY, SUPPLY REEL
A03	A-6039-021-A	MOTOR ASSY, TAKE-UP REEL
X01 ()	X-3651-315-0	CLAW ASSY, REEL
X02	X-3673-601-0	BAND ASSY, BRAKE
101	1-454-304-00	SOLENOID, 12V, 15/180 OHM
303	3-558-760-00	SPRING, COMPRESSION
304 ()	3-651-371-02	SHEET, REEL
305 ()	3-651-372-00	WASHER, REEL
306 ()	3-651-373-00	COVER
307 ()	3-651-375-00	SPRING, COMPRESSION
308 ()	3-651-377-00	SHEET, FRICTION
309 ()	3-651-378-00	SHEET, FRICTION ADJUSTMENT
310 ()	3-673-680-00	PIN, REEL STOPPER
311 ()	3-673-779-00	SHAFT, MAIN
312 ()	3-673-780-00	KNOB, REEL RETAINER
313 ()	3-673-810-00	PIN, SOLENOID
314	3-701-447-21	WASHER, M10, POLY
315	3-701-512-01	SET SCREW, 4x8
316	3-447-073-00	SPRING, TENSION
317	3-639-371-00	SPRING, TENSION
318 ()	3-680-319-01	PLATE(S), STOPPER
319 ()	3-680-320-01	PLATE(T), STOPPER
320 ()	3-673-711-02	CAM, REEL
401	4-836-109-00	SPRING, COMPRESSION
701	7-623-711-07	WASHER, M20, WAVE
702	7-624-105-04	STOP RING, E2, 3
703	7-624-106-04	STOP RING, E3
704	7-624-197-71	STOP RING, C20
705	7-682-388-04	SCREW, RK6x12
706	7-686-448-01	SCREW, PS3x8
707	7-686-527-01	SCREW, PSW3x8
708	7-686-552-01	SCREW, PSW4x16
709	7-688-003-01	WASHER, M3, SMALL
801	8-838-028-01	MOTOR, S REEL, BHF-2200A
802	8-838-028-11	MOTOR, T REEL, BHF-2200B

BVH-2180

REEL TABLE ASSY

REEL TABLE ASSY



D-17(a)

D-18(a)

BVH-2180
(J, U/C, PS, PM)

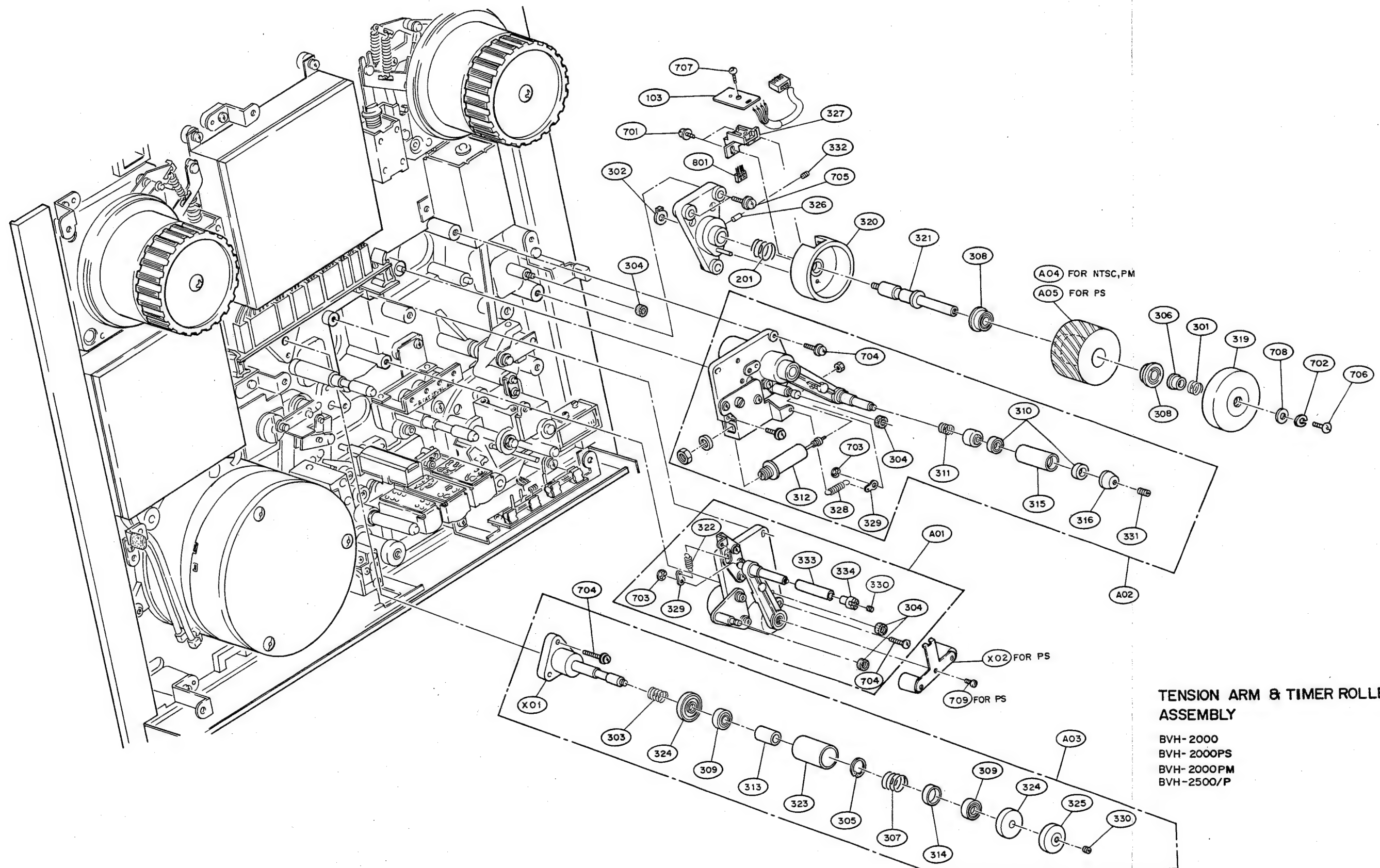
REEL TABLE ASSEMBLY (BVH-2180)

No.	Part No.	Description
A01 ()	A-6039-016-B	TABLE ASSY, REEL
A02	A-6039-024-A	MOTOR ASSY, SUPPLY REEL
A03	A-6039-025-A	MOTOR ASSY, TAKE-UP REEL
X01 ()	X-3651-315-0	CLAW ASSY, REEL
X02	X-3673-601-0	BAND ASSY, BRAKE
101	1-454-304-21	SOLENOID, 12V, 15/180 OHM
301	3-573-962-00	SPRING, TENSION
303	3-558-760-00	SPRING, COMPRESSION
304 ()	3-651-371-02	SHEET, REEL
305 ()	3-651-372-00	WASHER, REEL
306 ()	3-651-373-00	COVER
307 ()	3-651-375-00	SPRING, COMPRESSION
308 ()	3-651-377-00	SHEET, FRICTION
309 ()	3-651-378-00	SHEET, FRICTION ADJUSTMENT
310 ()	3-673-680-00	PIN, REEL STOPPER
311 ()	3-673-779-00	SHAFT, MAIN
312 ()	3-673-780-00	KNOB, REEL RETAINER
313 ()	3-673-810-00	PIN, SOLENOID
314	3-701-447-21	WASHER, M10, POLY
315	3-701-512-01	SET SCREW, 4x8
316	3-690-558-01	SPRING, TENSION
317	3-690-557-01	SPRING, TENSION
318 ()	3-680-319-01	PLATE(S), STOPPER
319 ()	3-680-320-01	PLATE(T), STOPPER
320 ()	3-673-711-02	CAM, REEL
401	4-836-109-00	SPRING, COMPRESSION
701	7-623-711-07	WASHER, M20, WAVE
702	7-624-105-04	STOP RING, E2.3
703	7-624-106-04	STOP RING, E3
704	7-624-197-71	STOP RING, C20
705	7-682-388-04	SCREW, RK6x12
706	7-686-448-01	SCREW, PS3x6
707	7-686-527-01	SCREW, PSW3x8
708	7-686-552-01	SCREW, PSW4x16
709	7-688-003-01	WASHER, M3, SMALL
801	8-838-088-01	MOTOR, S REEL, BHF-2201A
802	8-838-089-01	MOTOR, T REEL, BHF-2201B

TENSION ARM & TIMER ROLLER

TENSION ARM & TIMER ROLLER ASSEMBLY (BVH-2000/2180/2500/2700)

No.	Part No.	Description	No.	Part No.	Description
A01	A-6042-018-C	ARM ASSY,S TENSION	319 ()	3-673-627-00	FLANGE,CR UPPER
A02	A-6042-019-A	ARM ASSY,T TENSION (for BVH-2000/PS/PM) (for BVH-2500/P) (for BVH-2700)	320 ()	3-673-628-00	FLANGE,CR LOWER
	A-6042-021-A	ARM ASSY,T TENSION (for BVH-2180/PS/PM)	321 ()	3-673-629-00	SHAFT,CR
A03	A-6046-028-A	ROLLER ASSY,GUIDE	322 ()	3-673-652-02	SPRING,TENSION
A04	A-6045-018-C	ROLLER ASSY (for NTSC,PM)	323 ()	3-673-660-00	ROLLER,GUIDE
A05	A-6045-019-C	ROLLER ASSY (for PS,P)	324 ()	3-673-662-00	FLANGE,GR
X01 ()	X-3673-610-0	SHAFT ASSY,GR	325 ()	3-673-663-00	FLANGE,GR UPPER
X02 ()	X-3673-693-0	WEIGHT ASSY,BALANCE (for PS,P)	326 ()	3-673-667-00	PIECE
103 ()	1-606-698-00	TR-07 BOARD	327 ()	3-673-694-00	HOLDER,DME
201	2-263-515-00	SPRING,COMPRESSION	328	3-673-758-00	SPRING,TENSION (for BVH-2000/PS/PM) (for BVH-2500/P) (for BVH-2700)
301 ()	3-148-662-00	SPRING,COMPRESSION		3-690-507-01	SPRING,TENSION (for BVH-2180/PS/PM)
302	3-534-233-00	NUT,ADJUSTMENT	329	3-674-636-00	HOOK,SPRING
303	3-534-235-00	SPRING,COMPRESSION	330	3-701-505-00	SET SCREW,3x3
304 ()	3-534-255-00	CUSHION,BRAKE	331	3-701-506-01	SET SCREW,3x4
305	3-625-177-00	STOP RING 13	332	3-701-511-00	SET SCREW,4x6
306 ()	3-651-364-00	COLLAR,GR	333	3-680-331-01	COLLAR,S-TENSION
307	3-651-396-00	SPRING,COMPRESSION	334	3-680-332-01	CAP,S-TENSION
308	3-651-607-00	BEARING,BALL	701	7-621-981-15	SCREW,PSW2.6x6
309	3-656-948-00	BEARING,BALL	702	7-623-208-22	SPRING WASHER,M3
310	3-659-213-00	BEARING,BALL	703	7-624-193-07	STOP RING 2,GRIP
311 ()	3-663-116-00	SPRING,COMPRESSION	704	7-686-452-01	SCREW,PS3x16
312	3-673-614-00	DAMPER,AIR	705 ()	7-686-553-01	SCREW,PSW4x20
313	3-673-616-00	COLLAR,GR	706	7-686-628-04	SCREW,B3x14
314 ()	3-673-617-00	COLLAR,RETAINER,PRE-LOAD	707 ()	7-685-133-14	SCREW,BTP2.6x6
315 ()	3-673-620-00	ROLLER,T ARM	708	7-688-003-01	WASHER,M3,SMALL
316	3-673-621-00	CAP,T ARM	709	7-686-624-04	SCREW,B3x6
			801	8-745-211-00	DME,DM-211



TENSION ARM & TIMER ROLLER ASSEMBLY

BVH-2000
 BVH-2000PS
 BVH-2000PM
 BVH-2500/P

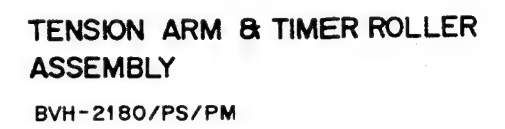
TENSION ARM & TIMER ROLLER

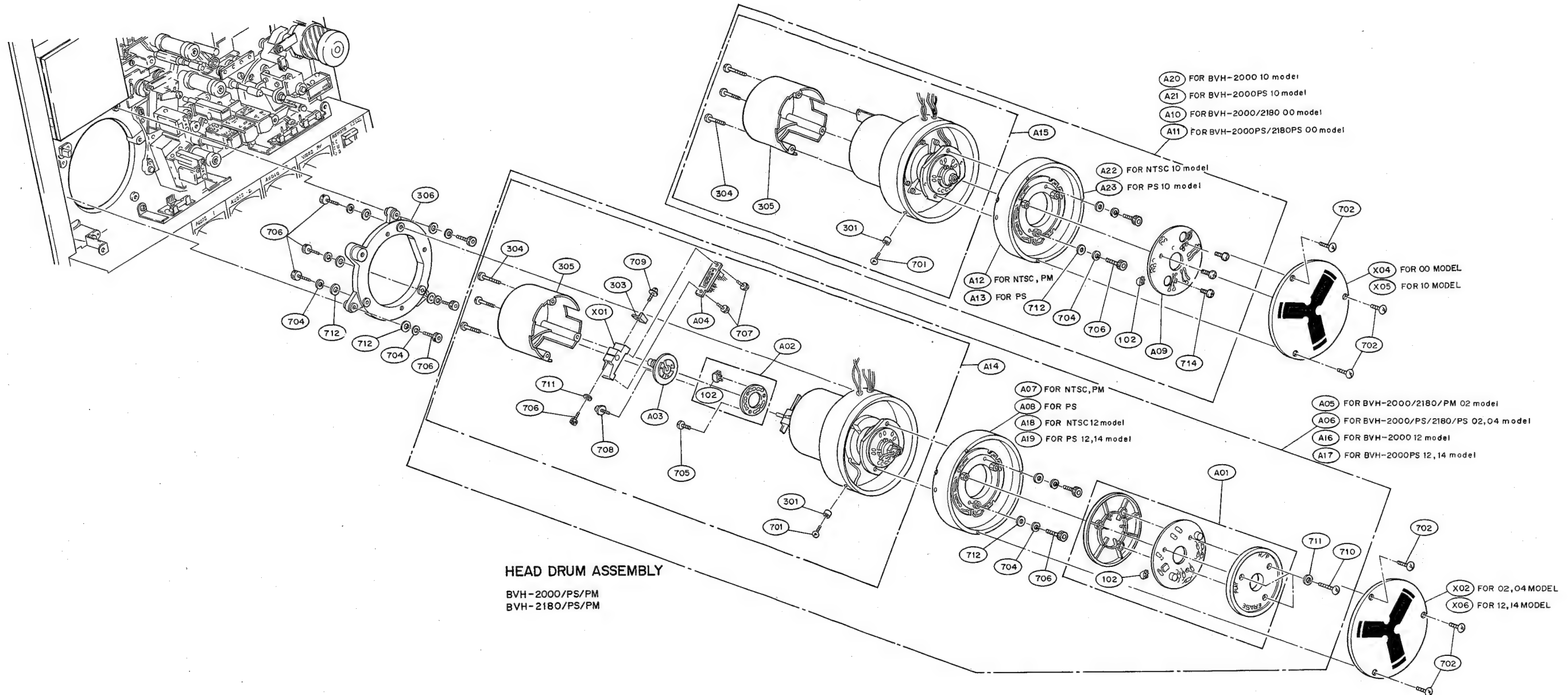
TENSION ARM & TIMER ROLLER ASSEMBLY (BVH-2000/2180/2500/2700)

No.	Part No.	Description	No.	Part No.	Description
A01	A-6042-018-C	ARM ASSY,S TENSION	319 ()	3-673-627-00	FLANGE,CR UPPER
			320 ()	3-673-628-00	FLANGE,CR LOWER
A02	A-6042-019-A	ARM ASSY,T TENSION (for BVH-2000/PS/PM) (for BVH-2500/P) (for BVH-2700)	321 ()	3-673-629-00	SHAFT,CR
			322 ()	3-673-652-02	SPRING,TENSION
			323 ()	3-673-660-00	ROLLER,GUIDE
	A-6042-021-A	ARM ASSY,T TENSION (for BVH-2180/PS/PM)	324 ()	3-673-662-00	FLANGE,GR
			325 ()	3-673-663-00	FLANGE,GR UPPER
A03	A-6046-028-A	ROLLER ASSY,GUIDE	326 ()	3-673-667-00	PIECE
A04	A-6045-018-C	ROLLER ASSY (for NTSC,PM)	327 ()	3-673-694-00	HOLDER,DME
A05	A-6045-019-C	ROLLER ASSY (for PS,P)	328	3-673-758-00	SPRING,TENSION (for BVH-2000/PS/PM) (for BVH-2500/P) (for BVH-2700)
X01 ()	X-3673-610-0	SHAFT ASSY,GR			
X02 ()	X-3673-693-0	WEIGHT ASSY,BALANCE (for PS,P)			
103 ()	1-606-698-00	TR-07 BOARD	3-690-507-01		SPRING,TENSION (for BVH-2180/PS/PM)
201	2-263-515-00	SPRING,COMPRESSION			
301 ()	3-148-662-00	SPRING,COMPRESSION			
			329	3-674-636-00	HOOK,SPRING
302	3-534-233-00	NUT,ADJUSTMENT	330	3-701-505-00	SET SCREW,3x3
303	3-534-235-00	SPRING,COMPRESSION	331	3-701-506-01	SET SCREW,3x4
304 ()	3-534-255-00	CUSHION,BRAKE	332	3-701-511-00	SET SCREW,4x6
305	3-625-177-00	STOP RING 13	333	3-680-331-01	COLLAR,S-TENSION
306 ()	3-651-364-00	COLLAR,GR			
			334	3-680-332-01	CAP,S-TENSION
307	3-651-396-00	SPRING,COMPRESSION	701	7-621-981-15	SCREW,PSW2.6x6
308	3-651-607-00	BEARING,BALL	702	7-623-208-22	SPRING WASHER,M3
309	3-656-948-00	BEARING,BALL	703	7-624-193-07	STOP RING 2,GRI P
310	3-659-213-00	BEARING,BALL	704	7-686-452-01	SCREW,PS3x16
311 ()	3-663-116-00	SPRING,COMPRESSION			
			705 ()	7-686-553-01	SCREW,PSW4x20
312	3-673-614-00	DAMPER,AIR	706	7-686-628-04	SCREW,B3x14
313	3-673-616-00	COLLAR,GR	707 ()	7-685-133-14	SCREW,BTP2.6x6
314 ()	3-673-617-00	COLLAR,RETAINER,PRE-LOAD	708	7-688-003-01	WASHER,M3,SMALL
315 ()	3-673-620-00	ROLLER,T ARM	709	7-686-624-04	SCREW,B3x6
316	3-673-621-00	CAP,T ARM	801	8-745-211-00	DME,DM-211

TENSION ARM & TIMER ROLLER

BVH-2180





HEAD DRUM ASSEMBLY (BVH-2000/2180)

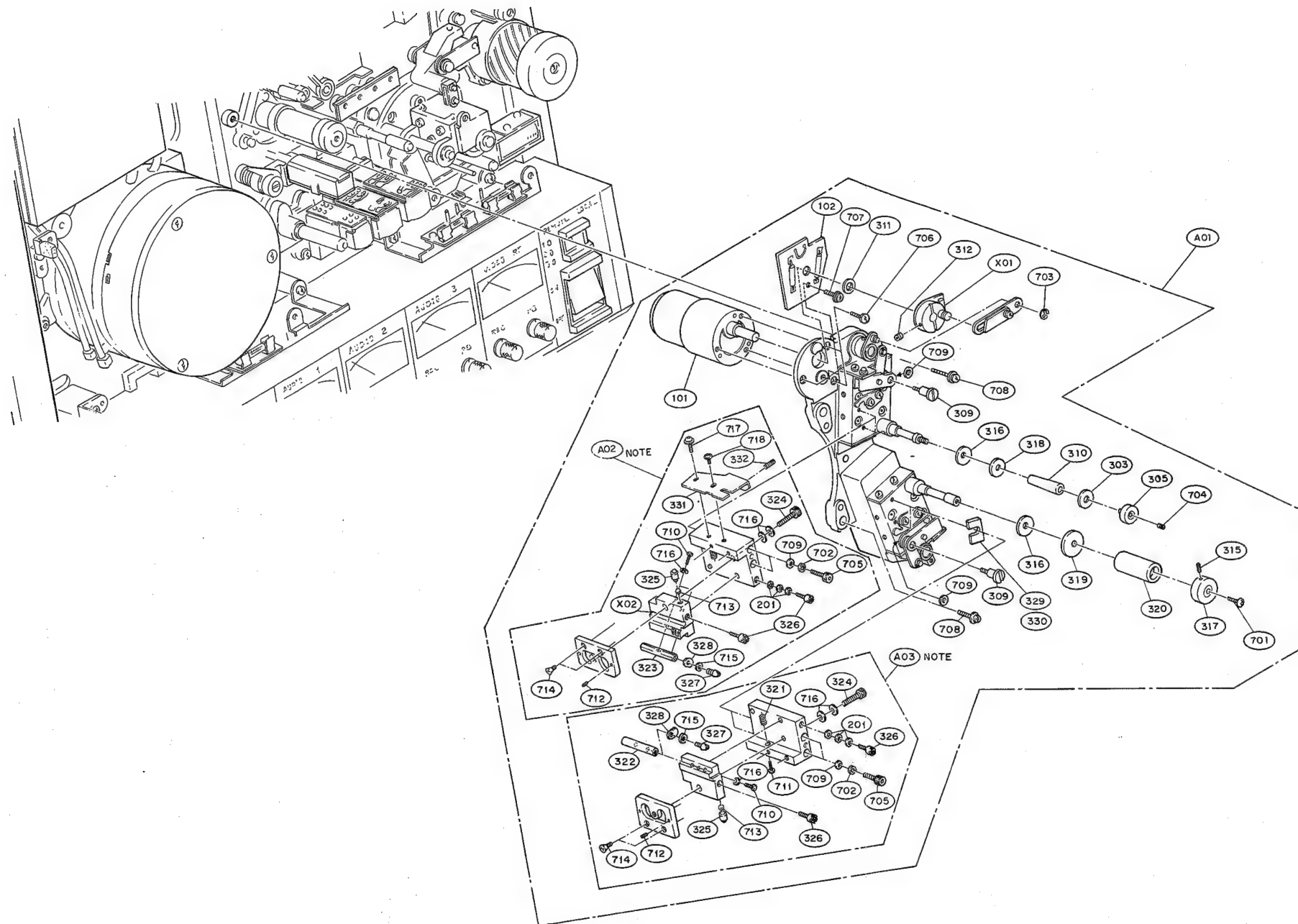
No.	Part No.	Description	No.	Part No.	Description
A01 ()	A-6049-008-A	COMPLETE PCB,DR-13R	A21	A-6050-429-A	HEAD DRUM ASSY,DMH-32A-R (for PS 10)
A02 ()	A-6026-023-B	MOUNTED PCB,SL-07	A22	A-6052-084-A	UPPER DRUM ASSY,DMR-31-R (for NTSC 10)
A03	A-6709-428-B	MOUNTED PCB,SL-08	A23	A-6052-086-A	UPPER DRUM ASSY,DMR-32-R (for PS 10)
A04	A-6709-429-C	MOUNTED PCB,SL-09	X01 ()	X-3673-405-0	FITTING BLOCK ASSY,FG
A05	A-6050-147-A	HEAD DRUM ASSY,DMH-17A-R (for NTSC 02,PM 02)	X02	X-3673-651-0	LID ASSY,DRUM
A06	A-6050-148-A	HEAD DRUM ASSY,DMH-18A-R (for PS 02,04)	X04	X-3673-681-0	LID ASSY,DRUM
A07	A-6052-046-A	UPPER DRUM ASSY,DMR-17-R (for NTSC 02,PM 02)	X05	X-3673-707-1	LID ASSY(NS),DRUM
A08	A-6052-047-A	UPPER DRUM ASSY,DMR-18-R (for PS 02,04)	X06	X-3673-708-1	LID ASSY(NS),DRUM
A09 ()	A-6010-070-A	MOUNTED PCB,DR-20 (Except for 12,14)	102	1-560-240-00	CONTACT
A10	A-6050-158-A	HEAD DRUM ASSY,DMH-19A-R (for NTSC 00,PM 00)	301 ()	3-654-914-00	STOPPER,TAPE
A11	A-6050-160-A	HEAD DRUM ASSY,DMH-20A-R (for PS 00)	303 ()	3-673-423-00	PLATE,SCALE
A12	A-6052-054-A	UPPER DRUM ASSY,DMR-19-R (for NTSC 00,PM 00)	304 ()	3-673-432-00	SCREW,M3x20,COVER
A13	A-6052-055-A	UPPER DRUM ASSY,DMR-20-R (for PS 00)	305 ()	3-673-434-00	COVER,SLIP RING
A14	A-6053-021-A	LOWER DRUM ASSY,DML-17A-R (for 02,04,12,14)	306	3-673-431-00	SLANT TABLE,DRUM
A15	A-6053-022-A	LOWER DRUM ASSY,DML-19A-R (for 00,10)	701	7-621-909-43	SCREW,P2,6x6
A16	A-6050-423-A	HEAD DRUM ASSY,DMH-29A-R (for NTSC 12)	702	7-621-912-38	SCREW,B2,6x6
A17	A-6050-425-A	HEAD DRUM ASSY,DMH-30A-R (for PS 12,14)	703	7-623-208-22	SPRING WASHER,M3
A18	A-6052-080-A	UPPER DRUM ASSY,DMR-29-R (for NTSC 12)	704	7-623-210-22	SPRING WASHER,M4
A19	A-6052-082-A	UPPER DRUM ASSY,DMR-30-R (for PS 12,14)	705	7-683-410-04	SCREW,C3x20
A20	A-6050-427-A	HEAD DRUM ASSY,DMH-31A-R (for NTSC 10)	706	7-683-422-04	SCREW,C4x14
			707	7-686-448-01	SCREW,PS3x8
			708	7-686-450-01	SCREW,PS3x12
			709	7-686-527-01	SCREW,PSW3x6
			710	7-686-625-04	SCREW,B3x8
			711	7-688-003-11	WASHER,M3,MIDDL
			712	7-688-004-11	WASHER,M4,MIDDL
			714	7-686-623-04	SCREW,B3x5

	UPPER DRUM ASSY	LOWER DRUM ASSY	HEAD DRUM ASSY
NTSC,PM(02 model)	DMR-17-R	DML-17A-R	DMH-17A-R
NTSC(00 model)	DMR-19-R	DML-19A-R	DMH-19A-R
PS(02,04 model)	DMR-18-R	DML-17A-R	DMH-18A-R
PS(00 model)	DMR-20-R	DML-19A-R	DMH-20A-R
NTSC (12 model)	DMR-29-R	DML-17A-R	DMH-29A-R
NTSC (10 model)	DMR-31-R	DML-19A-R	DMH-31A-R
PS (12,14 model)	DMR-30-R	DML-17A-R	DMH-30A-R
PS (10 model)	DMR-32-R	DML-19A-R	DMH-32A-R

MOVABLE GUIDE ASSY

MOVABLE GUIDE ASSEMBLY (BVH-2000/2180/2500/2700)

No.	Part No.	Description	No.	Part No.	Description
A01	A-6046-034-B	GUIDE ASSY,MOVABLE,TYPE A (for BVH-2000/PS/PM) (for BVH-2180/PS/PM) (for BVH-2500/P)	330	3-630-035-11	SPACER($t=0.02$)
	A-6046-046-A	GUIDE ASSY,MOVABLE,TYPE HS (for BVH-2700)	331 ()	3-680-362-01	FENCE
A02	A-6046-037-C	GUIDE ASSY,S SLANT	332	3-701-507-00	SETSCREW 3x5
A03	A-6046-035-A	GUIDE ASSY,T SLANT,TYPE A (for BVH-2000/PS/PM) (for BVH-2180/PS/PM) (for BVH-2500/P)	701	7-621-912-38	SCREW,B2.6x6
	A-6046-047-A	GUIDE ASSY,T SLANT,TYPE HS (for BVH-2700)	702	7-623-208-22	SPRING WASHER,M3
X01 ()	X-3673-619-0	DISK ASSY	703	7-624-106-04	STOP RING,E3
X02	X-3673-620-0	HOLDER ASSY,S GUIDE	704	7-683-237-01	SET SCREW,3x3
101	1-541-198-00	MOTOR,GEARED,DC12V EN35-H1G9B	705	7-683-406-04	SCREW,C3x12
102 ()	1-606-701-00	TH-03 BOARD	706	7-686-447-01	SCREW,PS3x6
201	2-529-922-00	WASHER(B)	707	7-686-528-01	SCREW,PSW3x8
303	3-651-427-03	FLANGE,TAPE GUIDE	708 ()	7-686-553-01	SCREW,PSW4x20
304	3-659-213-00	BEARING,BALL	709	7-688-003-01	WASHER,M3
305 ()	3-673-647-00	CAP A	710	7-621-259-42	SCREW,P2.6x6
309 ()	3-673-651-00	SHAFT,LEVER	711	7-621-259-62	SCREW,P2.6x10
310	3-673-725-02	GUIDE,TAPER	712	7-621-732-08	SET SCREW,2x3
311	3-701-444-21	WASHER,M6,POLY	713	7-671-155-01	STEEL BALL 3.0
312	3-701-510-00	SET SCREW,4x4	714	7-682-247-15	SCREW,K3x6
315	3-701-505-00	SET SCREW,3x3	715	7-688-002-03	WASHER,M2.6,SMALL
316 ()	3-680-324-00	SPRING	716	7-688-004-03	WASHER,M4,SMALL
317 ()	3-680-325-00	FLANGE,HEIGHT ADJUSTMENT	717	7-621-981-45	SCREW,PSW2.6x12
318 ()	3-680-326-00	FLANGE(S)	718	7-621-981-25	SCREW,PSW2.6x8
319 ()	3-680-327-00	FLANGE (T)			
320	3-680-328-02	GUIDE,T FIXED			
321	3-513-234-00	SPRING,COMPRESSION			
322	3-654-805-00	PIN(T),GUIDE			
323	3-654-835-00	PIN(S),GUIDE			
324	3-657-705-11	SCREW,C4x20			
325	3-673-720-00	ROD,SLANT ADJUSTMENT			
326	3-673-722-00	SCREW,ADJUSTMENT			
327	3-674-683-00	SCREW,FITTING,FLANGE			
328	3-680-321-00	FLANGE,GUIDE PIN			
329	3-630-035-01	SPACER($t=0.01$)			



Note:
For replacement of the components of A02 and A03, contact your SONY Office.

MOVABLE GUIDE ASSEMBLY

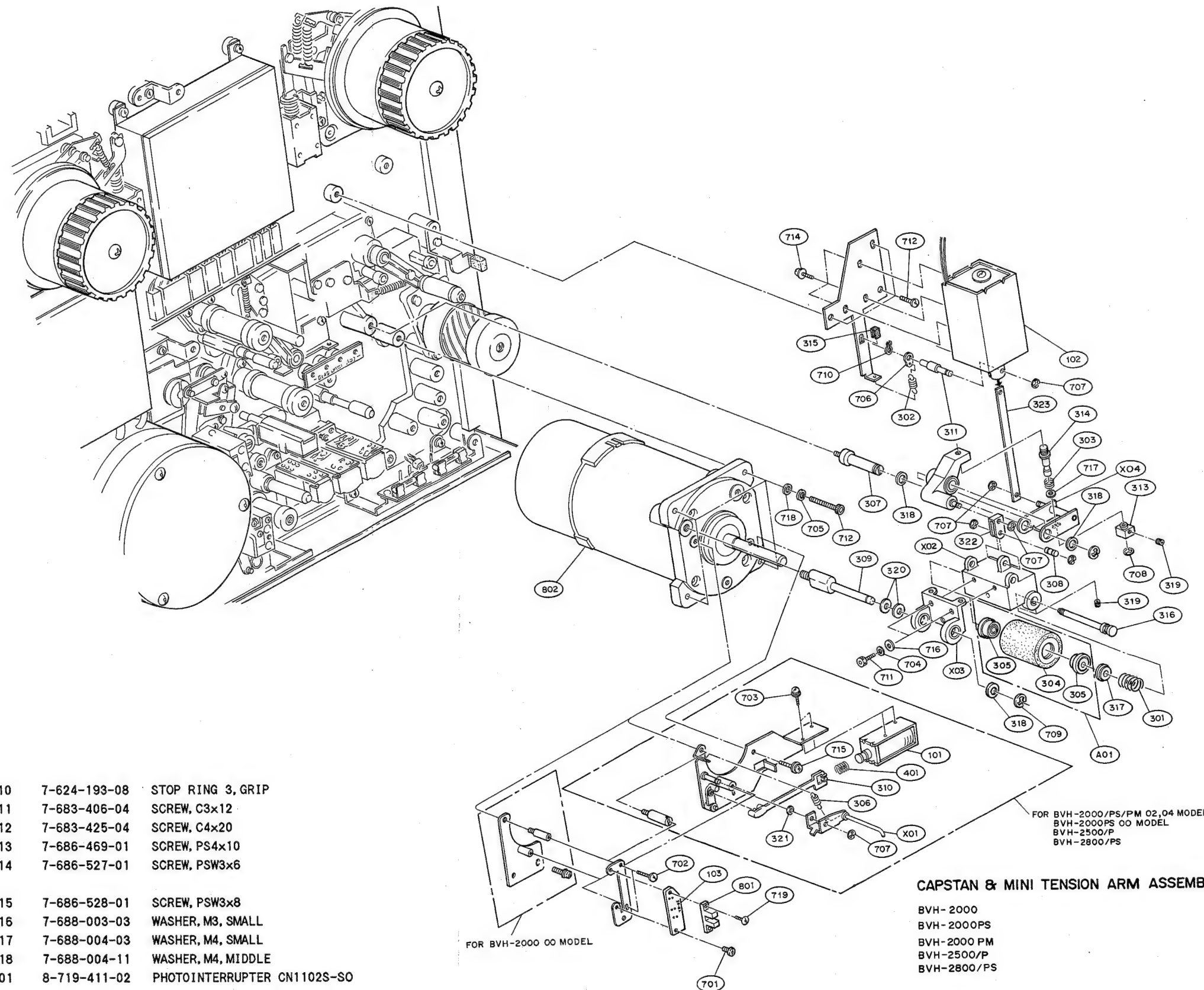
BVH-2000/PS/PM
BVH-2180/PS/PM
BVH-2500/P
BVH-2700

CAPSTAN & MINI TENSION ARM ASSEMBLY (BVH-2000/2500/2800)

No.	Part No.	Description
A01	A-6035-036-A	ROLLER ASSY
X01	() X-3673-669-0	ARM ASSY, MINI TENSION (for BVH-2000/PS/PM 02, 04) (for BVH-2500) (for BVH-2800/PS)
X02	() X-3673-671-1	PINCH LEVER (1) ASSY
X03	() X-3673-672-2	PINCH LEVER (2) ASSY
X04	() X-3673-628-2	LEVER (2) ASSY, JOINT
101	1-454-263-21	SOLENOID, 12V, 60 OHM (for BVH-2000/PS/PM 02, 04) (for BVH-2500/P) (for BVH-2800/PS)
102	1-454-305-00	SOLENOID, 12V 20/52 OHM
103	() 1-606-702-00	TD-05 BOARD (WITHOUT COMPONENT)
301	3-530-045-00	SPRING, COMPRESSION
302	3-534-217-00	SPRING, TENSION
303	3-534-236-00	SPRING, COMPRESSION
304	3-656-909-02	PINCH ROLLER
305	3-656-913-00	BEARING, BALL
306	() 3-673-652-00	SPRING, TENSION
307	() 3-673-656-00	SHAFT, LEVER
308	() 3-673-658-00	PIN (2), JOINT
309	() 3-673-659-00	SHAFT, PINCH ROLLER
310	() 3-673-738-00	ROD
311	() 3-673-748-00	PIN, JOINT
313	() 3-673-751-00	STOPPER
314	() 3-673-752-00	SHAFT, PRESS ADJUSTMENT
315	() 3-673-795-00	CUSHION
316	() 3-673-807-00	SHAFT, PINCH ROLLER
317	() 3-673-808-00	RETAINER, BEARING
318	3-701-445-21	WASHER, M7, POLY
319	3-701-505-00	SET SCREW, 3x3
320	3-701-445-11	WASHER, M7, POLY
321	() 3-680-322-00	SPRING, FRICTION
322	() 3-673-657-02	JOINT
323	() 3-673-747-01	JOINT (2)
401	4-820-917-01	SPRING, COMPRESSION
701	7-621-972-25	SCREW, PS2, 6x6
702	7-621-972-35	SCREW, PS2, 6x8
703	7-621-981-05	SCREW, PSW2, 6x5
704	7-623-208-22	SPRING WASHER, M3
705	7-623-210-22	SPRING WASHER, M4
706	7-623-508-01	LUG 3
707	7-624-105-04	STOP RING, E2, 3
708	7-624-106-04	STOP RING, E3
709	7-624-110-04	STOP RING, E6

710	7-624-193-08	STOP RING 3, GRIP
711	7-683-406-04	SCREW, C3x12
712	7-683-425-04	SCREW, C4x20
713	7-686-469-01	SCREW, PS4x10
714	7-686-527-01	SCREW, PSW3x6
715	7-686-528-01	SCREW, PSW3x8
716	7-688-003-03	WASHER, M3, SMALL
717	7-688-004-03	WASHER, M4, SMALL
718	7-688-004-11	WASHER, M4, MIDDLE
801	8-719-411-02	PHOTOINTERRUPTER CN1102S-SO
802	8-838-029-01	MOTOR, CAPSTAN, BHF-2300A

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CAPSTAN & MINI TENSION ARM ASSEMBLY

BVH-2000
BVH-2000PS
BVH-2000 PM
BVH-2500/P
BVH-2800/PS

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BVH-2000/2500
(J, U/C, PS, PM)

CAPSTAN & MINI TENSION ARM

CAPSTAN & MINI TENSION ARM ASSEMBLY (BVH-2180/2830)

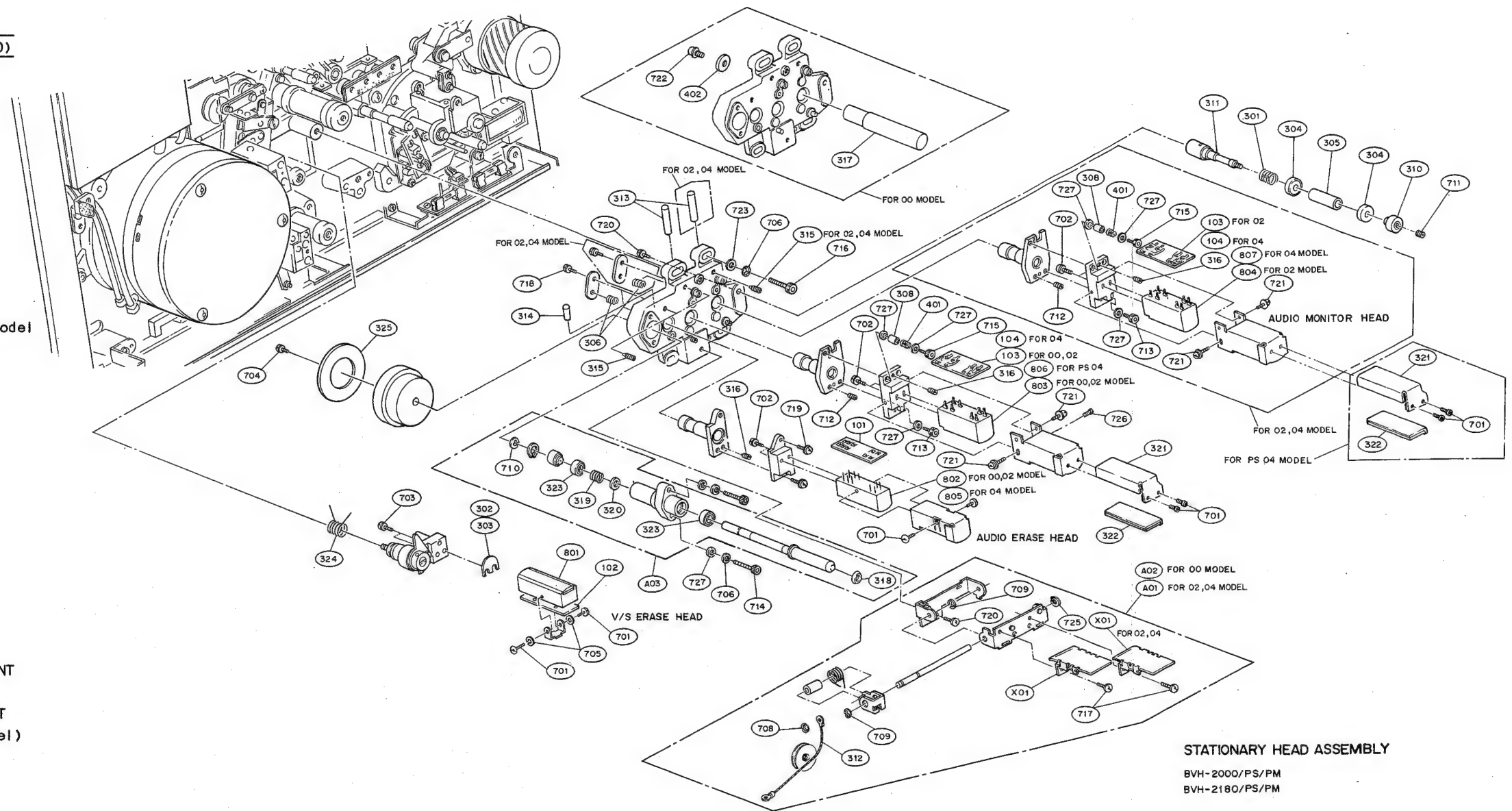
710	7-624-193-08	STOP RING 3, GRIP
711	7-683-406-04	SCREW, C3x12
712	7-683-425-04	SCREW, C4x20
713	7-686-469-01	SCREW, PS4x10
714	7-686-527-01	SCREW, PSW3x6
715	7-686-528-01	SCREW, PSW3x8
716	7-688-003-03	WASHER, M3, SMALL
717	7-688-004-03	WASHER, M4, SMALL
718	7-688-004-11	WASHER, M4, MIDDLE
801	8-719-411-02	PHOTOINTERRUPTER CN1102S-SO
802	8-838-029-01	MOTOR, CAPSTAN, BHF-2300A



STATIONARY HEADS ASSEMBLY (BVH-2000/2180/2500)

No.	Part No.	Description
A01 ()	A-6036-052-A	SHIELD ASSY,FRONT (for 02,04 model)
A02 ()	A-6036-059-A	SHIELD ASSY,FRONT (for 00 model)
A03	A-6046-027-E	SHAFT ASSY, IP
X01 ()	X-3673-611-0	PLATE ASSY,SHIELD
101 ()	1-588-946-00	CEH-2 BOARD
102 ()	1-606-679-00	HD-06 BOARD
103 ()	1-606-680-00	HD-07 BOARD,for 00,02 model
104 ()	1-606-681-00	HD-08 BOARD,for PS 04
301	3-650-523-00	SPRING,COMPRESSION
302	3-651-419-01	SPACER (B),ERASE HEAD
303	3-651-419-21	SPACER (B),ERASE HEAD
304	3-651-427-00	FLANGE,TAPE GUIDE
305	3-651-428-00	GUIDE,TAPE
306	3-653-350-00	SPRING,COMPRESSION
308 ()	3-661-588-00	SPACER
310 ()	3-673-647-00	CAP A
311 ()	3-673-669-02	SHAFT,FIXED GUIDE
312	3-673-674-00	WIRE
313 ()	3-673-696-01	ROD,LOCK
314 ()	3-673-696-11	ROD,LOCK
315 ()	3-673-906-00	SET SCREW,4x10,CONE POINT
316	3-673-907-00	SET SCREW,3x6,CONE POINT
317	3-674-665-00	GUIDE,DUMMY (for 00 model)
318 ()	3-680-363-01	CAP, IP SHAFT
319 ()	3-674-689-00	SPRING,COMPRESSION
320 ()	3-674-690-00	SHIM

321 ()	3-674-692-00	COVER,SHIELD,HEAD,R/P	709	7-624-106-04	STOP RING,E3
322 ()	3-674-693-00	INSULATOR	710	7-624-108-04	STOP RING,E4
323	3-659-213-00	BEARING,BALL	711	7-683-237-01	SET SCREW,3x3,FLAT POINT
324 ()	3-673-791-02	SPRING,TORSION	713	7-683-405-04	SCREW,C3x10
325	3-673-686-00	PLATE, FRICTION	714	7-683-407-04	SCREW,C3x14
401	4-812-546-01	SPRING,COMPRESSION,(B)	715	7-683-408-04	SCREW,C3x16
402	4-828-624-01	WASHER,DIA.16	716	7-683-425-04	SCREW,C4x20
701	7-621-911-08	SCREW,B2x3	717	7-686-446-01	SCREW,PS3x5
702	7-621-972-25	SCREW,PS2,6x6	718	7-686-447-01	SCREW,PS3x6
703	7-621-972-45	SCREW,PS2,6x10	719	7-686-448-01	SCREW,PS3x8
704	7-621-981-15	SCREW,PSW2,6x6	720	7-686-469-01	SCREW,PS4x10
705	7-623-205-22	SPRING WASHER,M2	721	7-686-527-01	SCREW,PSW3x6
706	7-623-208-22	SPRING WASHER,M3	722	7-686-548-01	SCREW,PSW4x8
707	7-623-210-22	SPRING WASHER,M4	723	7-688-004-11	WASHER,M4,MIDDLE
708	7-624-105-04	STOP RING,E2,3	725	7-624-193-01	STOP RING 4,GRIP



STATIONARY HEAD ASSEMBLY

BVH-2000/PS/PM
BVH-2180/PS/PM

Note: BVH-2500 series has only 02 model.

726	7-686-623-04	SCREW,B3x5
727	7-688-003-01	WASHER,M3,SMALL
801	8-825-725-10	HEAD,VIDEO/SYNC ERASE, EF204-5102
802	8-825-725-50	HEAD,AUDIO ERASE,EF204-5104B (for 00,02 model)
803	8-825-737-10	HEAD,AUDIO R/P,PA77-5104C (for 00,02 model)
804	8-825-737-20	HEAD,AUDIO MONITOR, PA77-5104D (for 02 model)
805	8-825-725-70	HEAD,AUDIO ERASE,EF204-5105A (for PS 04)
806	8-825-737-61	HEAD,AUDIO R/P,PA77-5105B (for PS 04)
807	8-825-737-71	HEAD,AUDIO MONITOR,PA77-5105C (for PS 04)

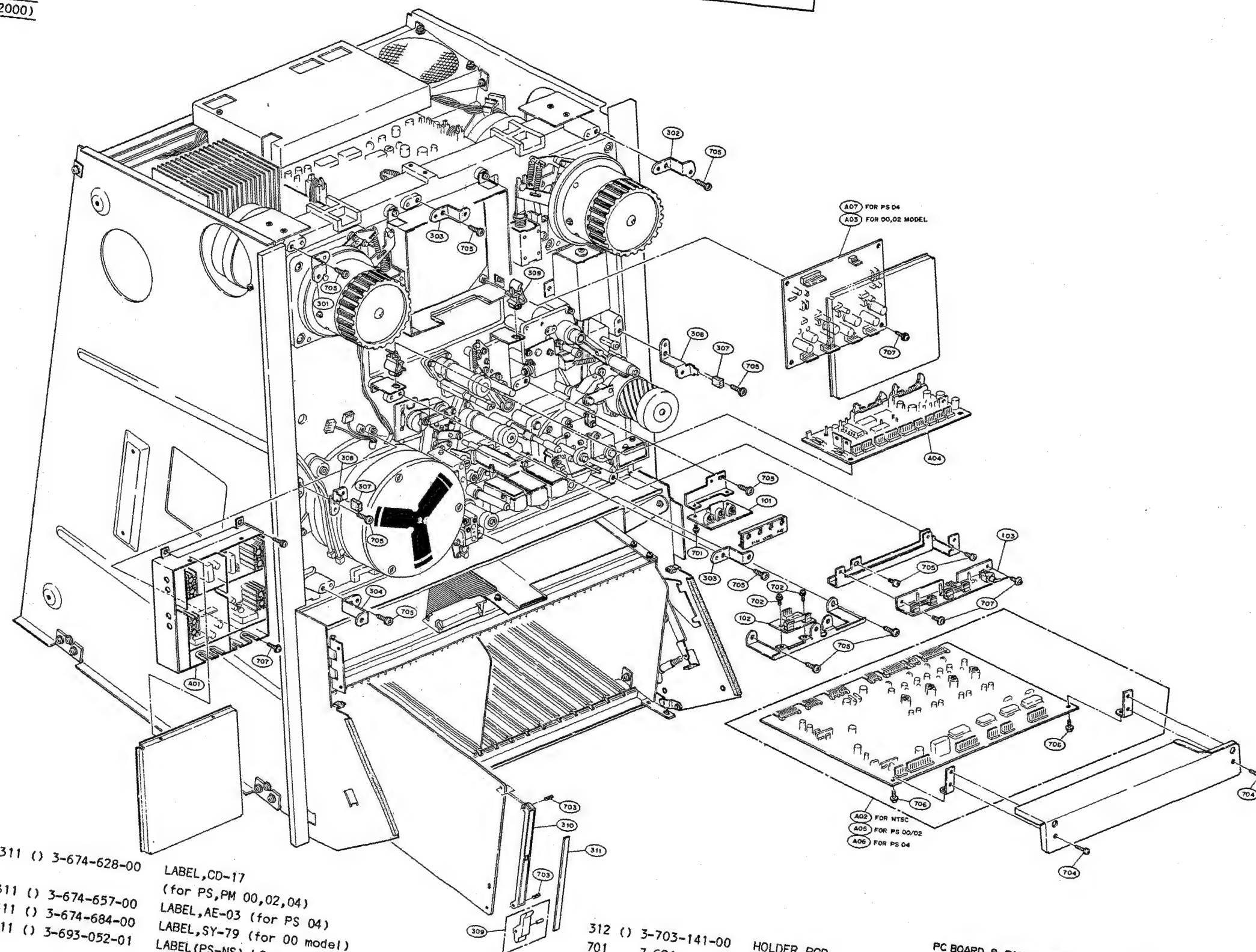
PC BOARD & PANEL BRACKET

PC BOARD & PANEL BRACKET

PC BOARDS & PANEL BRACKETS ON FRONT (BVH-2000)

- | No. | Part No. | Description |
|---------|--------------|---------------------------------------------|
| A01 () | A-6011-063-A | COMPLETE PCB,RP-09 |
| A02 () | A-6013-067-A | COMPLETE PCB,AP-12
(for NTSC,PM) |
| A03 () | A-6013-046-A | COMPLETE PCB,BE-03
(for 00,02 model) |
| A04 () | A-6025-084-A | COMPLETE PCB,TT-01 |
| A05 () | A-6013-068-A | COMPLETE PCB,AP-12
(for PS 00/02) |
| A06 () | A-6013-069-A | COMPLETE PCB,AP-12
(for PS 04) |
| A07 () | A-6013-054-A | COMPLETE PCB,BE-03
(for PS 04) |
| 101 () | 1-606-676-00 | BE-04 BOARD
(WITHOUT COMPONENT) |
| 102 () | 1-606-699-00 | HM-05 BOARD
(WITHOUT COMPONENT) |
| 103 () | 1-609-959-00 | TM-16 BOARD
(WITHOUT COMPONENT) |
| 301 () | 3-673-677-00 | BRACKET(1),PANEL |
| 302 () | 3-673-678-00 | BRACKET(2),PANEL |
| 303 () | 3-673-679-01 | BRACKET(3),PANEL |
| 304 () | 3-673-679-11 | BRACKET(3),PANEL |
| 307 () | 3-673-784-00 | CAP |
| 308 () | 3-673-785-00 | BRACKET(4),PANEL |
| 309 () | 3-673-865-00 | LEVER |
| 310 () | 3-673-867-00 | PLATE,INDICATION,PC BOARD |
| 311 () | 3-674-611-00 | LABEL,AU-27 |
| 311 () | 3-674-612-00 | LABEL,AE-03 (for 00,02 model) |
| 311 () | 3-674-613-00 | LABEL,EQ-02
(for NTSC,PS,PM 00,02,04) |
| 311 () | 3-674-614-00 | LABEL,DM-25 |
| 311 () | 3-674-615-00 | LABEL,MD-14
(for NTSC,PS,PM 00,02,04) |
| 311 () | 3-674-616-11 | LABEL,LG-02(A)
(for NTSC 00,02) |
| 311 () | 3-674-617-00 | LABEL,SY-79 (for 02,04 model) |
| 311 () | 3-674-618-00 | LABEL,SY-80 (for NTSC,PM) |
| 311 () | 3-674-619-00 | LABEL,SV-43 |
| 311 () | 3-674-620-00 | LABEL,RL-12 |
| 311 () | 3-674-621-00 | LABEL,CD-17 (for NTSC 00,02) |
| 311 () | 3-674-622-00 | LABEL,SR-15 (for NTSC) |
| 311 () | 3-674-623-00 | LABEL,DT-04 (for NTSC,PM) |
| 311 () | 3-674-624-00 | LABEL,SY-80 (for PS) |
| 311 () | 3-674-625-03 | LABEL,DT-05 (for PS) |
| 311 () | 3-674-626-00 | LABEL,SR-15 (for PS,PM) |
| 311 () | 3-674-627-11 | LABEL,LG-02(A)
(for NTSC,PS,PM 00,02,04) |
| 311 () | 3-674-628-00 | LABEL,CD-17
(for PS,PM 00,02,04) |
| 311 () | 3-674-657-00 | LABEL,AE-03 (for PS 04) |
| 311 () | 3-674-684-00 | LABEL,SY-79 (for 00 model) |
| 311 () | 3-693-052-01 | LABEL(PS-NS) LG-02
(for PS 10,12,14) |
| 311 () | 3-693-053-01 | LABEL(PS-NS) CD-17
(for PS 10,12,14) |
| 311 () | 3-693-055-01 | LABEL(NS) MD-14 (for 10,12,14) |
| 311 () | 3-693-056-01 | LABEL(NS) EQ-02 (for 10,12,14) |
| 311 () | 3-693-057-01 | LABEL(NS) LG-02 (for U/C 10,12) |
| 311 () | 3-693-058-01 | LABEL(NS) CD-17 (for U/C 10,12) |

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- | | | |
|---------|--------------|------------------|
| 312 () | 3-703-141-00 | HOLDER,PCB |
| 701 | 7-621-981-05 | SCREW,PSW2.6x5 |
| 702 | 7-621-981-15 | SCREW,PSW2.6x6 |
| 703 () | 7-626-317-21 | SPRING PIN 2.5x8 |
| 704 | 7-686-447-01 | SCREW,PS3x6 |
| 705 | 7-686-469-01 | SCREW,PS4x10 |
| 706 | 7-686-527-01 | SCREW,PSW3x6 |
| 707 | 7-686-528-01 | SCREW,PSW3x8 |

PC BOARD & PANEL BRACKETS ON FRONT

BVH-2000
BVH-2000PS
BVH-2000PM

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BVH-2000
(J, U/C, PS, PM)

BVH-2180

PC BOARDS & PANEL BRACKETS ON FRONT (BVH-2180)

No. Part No. Description

A01 () A-6011-063-A COMPLETE PCB,RP-09
 A02 () A-6013-067-A COMPLETE PCB,AP-12
 (for NTSC,PM)
 A03 () A-6013-046-A COMPLETE PCB,BE-03
 (for 00,02 model)
 A04 () A-6025-091-A COMPLETE PCB,TT-01
 A05 () A-6013-068-A COMPLETE PCB,AP-12
 (for PS 00/02)

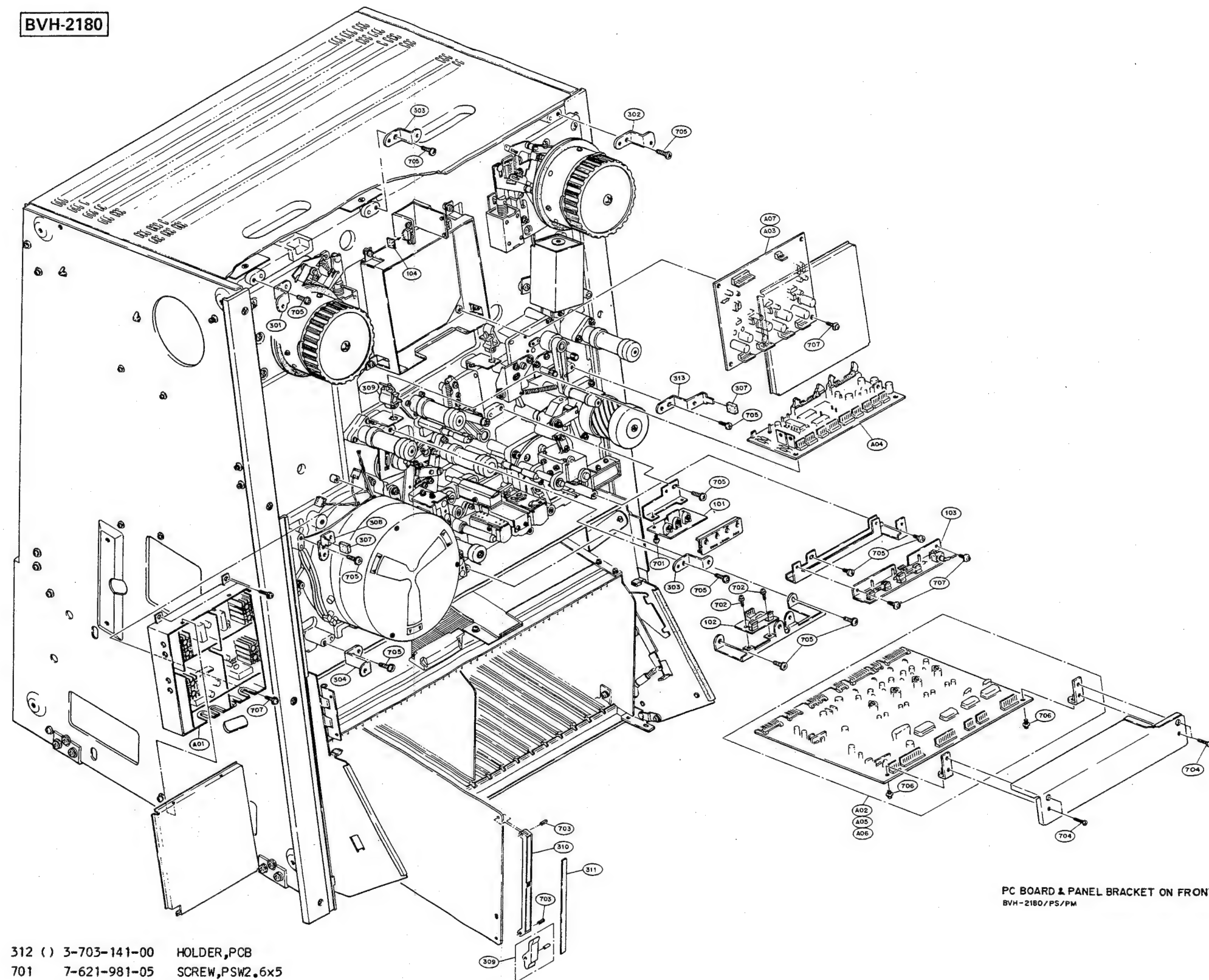
A06 () A-6013-069-A COMPLETE PCB,AP-12
 (for PS 04)
 A07 () A-6013-054-A COMPLETE PCB,BE-03
 (for PS 04)
 101 () 1-606-676-00 BE-04 BOARD
 (WITHOUT COMPONENT)
 102 () 1-606-699-00 HM-05 BOARD
 (WITHOUT COMPONENT)
 103 () 1-609-959-12 TM-16 BOARD
 (WITHOUT COMPONENT)
 104 () 1-613-389-11 RS-18 BOARD
 (WITHOUT COMPONENT)

301 () 3-673-677-00 BRACKET(1),PANEL
 302 () 3-673-678-00 BRACKET(2),PANEL
 303 () 3-673-679-01 BRACKET(3),PANEL
 304 () 3-673-679-11 BRACKET(3),PANEL
 307 () 3-673-784-00 CAP
 308 () 3-673-785-00 BRACKET(4),PANEL
 309 () 3-673-865-00 LEVER
 310 () 3-673-867-00 PLATE,INDICATION,PC BOARD

311 () 3-674-611-00 LABEL,AU-27
 311 () 3-674-612-00 LABEL,AE-03 (for 00,02 model)
 311 () 3-674-613-00 LABEL,EQ-02
 311 () 3-674-614-00 LABEL,DM-25
 311 () 3-674-615-00 LABEL,MD-14
 311 () 3-674-616-11 LABEL,LG-02(A)
 311 () 3-674-617-00 LABEL,SY-79 (for 02,04 model)
 311 () 3-674-618-00 LABEL,SY-80 (for NTSC,PM)
 311 () 3-690-530-01 LABEL,SV-43
 311 () 3-690-531-01 LABEL,RL-12
 311 () 3-674-621-00 LABEL,CD-17 (for NTSC)
 311 () 3-674-622-00 LABEL,SR-15 (for NTSC)
 311 () 3-674-623-00 LABEL,DT-04 (for NTSC,PM)
 311 () 3-674-624-00 LABEL,SY-80 (for PS)
 311 () 3-674-625-03 LABEL,DT-05 (for PS)
 311 () 3-674-626-00 LABEL,SR-15 (for PS,PM)
 311 () 3-674-627-11 LABEL,LG-02(A)
 311 () 3-674-628-00 LABEL,CD-17 (for PS,PM)
 311 () 3-674-657-00 LABEL,AE-03 (for PS 04)
 311 () 3-674-684-00 LABEL,SY-79 (for 00 model)

312 () 3-703-141-00 HOLDER,PCB
 701 7-621-981-05 SCREW,PSW2,6x5
 702 7-621-981-15 SCREW,PSW2,6x6
 703 () 7-626-317-21 SPRING PIN 2,5x8
 704 7-686-447-01 SCREW,PS3x6
 705 7-686-469-01 SCREW,PS4x10
 706 7-686-527-01 SCREW,PSW3x6
 707 7-686-528-01 SCREW,PSW3x8

D-33(a)

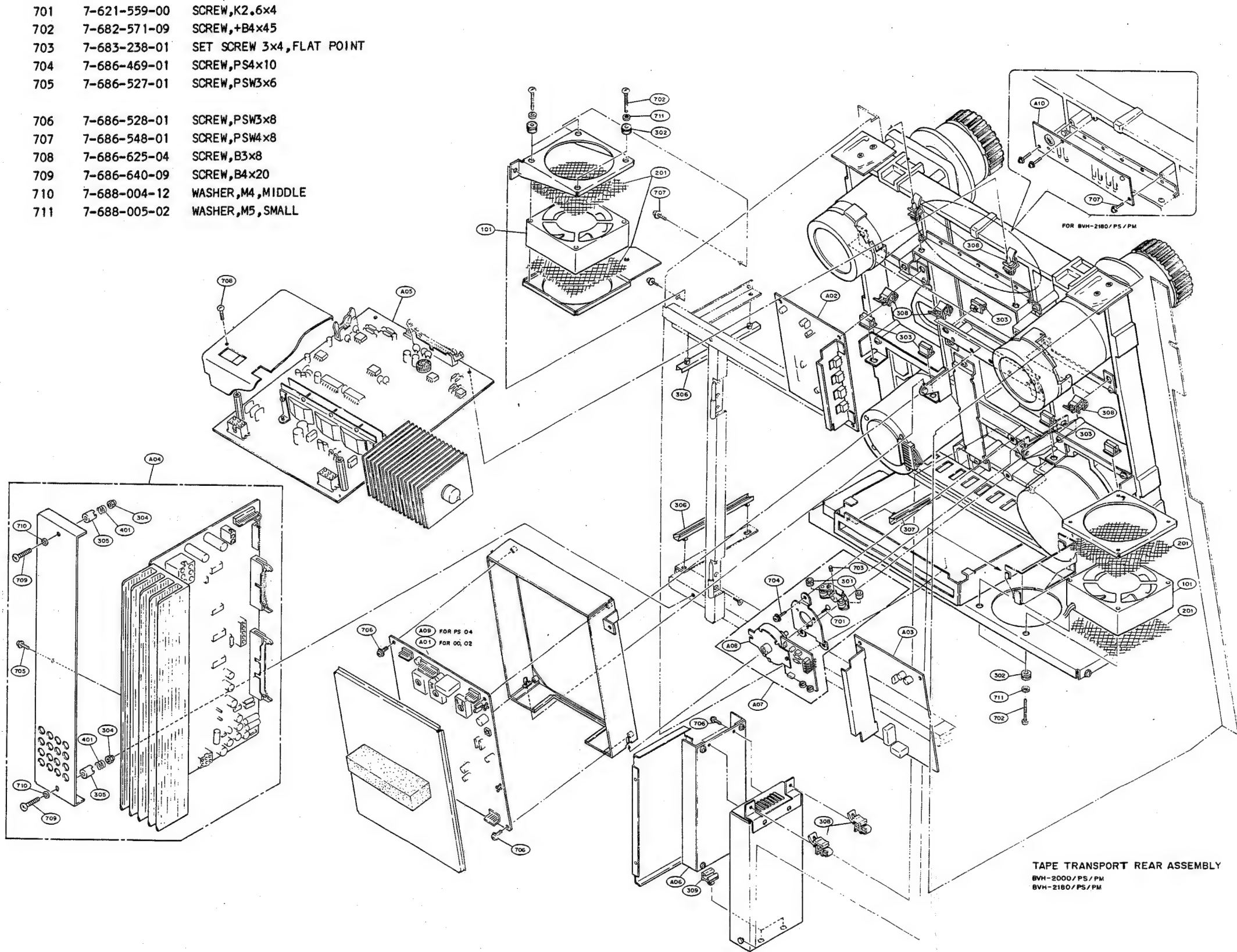
PC BOARD & PANEL BRACKET ON FRONT
BVH-2180/PS/PM

D-34(a)

BVH-2180
(J, U/C, PS, PM)

TAPE TRANSPORT REAR ASSEMBLY (BVH-2000/2180/2500)

No.	Part No.	Description
A01 ()	A-6013-045-B	COMPLETE PCB,BE-02 (for BVH-2000/2180/PS/PM) 00,02 model) (for BVH-2500/P)
A02 ()	A-6015-064-A	COMPLETE PCB,CA-09
A03 ()	A-6015-065-A	COMPLETE PCB,DA-07
A04 ()	A-6023-030-A	COMPLETE PCB,PS-14
A05 ()	A-6023-031-A	COMPLETE PCB,RA-05
A06	A-6023-032-A	COMPLETE PCB,DD-01 (for BVH-2500)
	A-6023-035-A	COMPLETE PCB,DD-03 (for BVH-2000/PS/PM) (for BVH-2180/PS/PM)
A07 ()	A-6037-022-A	MOTOR ASSY,IP DRIVING
A08 ()	A-6037-025-A	MOTOR ASSY,ROLLER
A09 ()	A-6013-053-B	COMPLETE PCB,BE-02 (for BVH-2000PS 04 model) (for BVH-2180PS 04 model)
A10 ()	A-6025-093-A	COMPLETE PCB,RS-17 (for BVH-2180/PS/PM)
101	1-541-170-21	FAN,DC12V,FB-08B12HA
201 ()	2-252-609-00	COVER,FAN
301 ()	3-534-255-00	CUSHION,BRAKE
302 ()	3-630-837-00	BUSHING
303 ()	3-642-310-00	HOLDER,CIRCUIT BOARD
304 ()	3-680-316-00	NUT,M4,NYLON
305 ()	3-651-849-00	SPACER,PANEL
306 ()	3-673-676-11	RAIL,PC BOARD GUIDE
307 ()	3-673-676-21	RAIL,PC BOARD GUIDE
308 ()	3-703-141-00	HOLDER,CIRCUIT BOARD
309 ()	3-703-072-00	HOLDER,CIRCUIT BOARD
401 ()	3-303-890-01	SPRING,COMPRESSION



Ref.No. or Q'ty	Part No.	Description
<u>AU-27 BOARD (BVH-2000PS,2180PS/CARD RACK)</u>		
1pc	() A-6013-050-A	COMPLETE PCB,AU-27 (This assembly includes the following parts.)
C102,109,202,209		
	1-107-085-00	CAP,MICA 100PF 5% 50V
C180,280	1-107-210-00	CAP,MICA 22PF 5% 500V
C161	1-109-540-00	CAP,MICA 180PF 5% 100V
C267	1-109-541-00	CAP,MICA 200PF 5% 100V
C261,262	1-109-542-00	CAP,MICA 220PF 5% 100V
C167	1-109-543-00	CAP,MICA 240PF 5% 100V
C162	1-109-547-00	CAP,MICA 330PF 5% 100V
C163,263	1-109-549-00	CAP,MICA 390PF 5% 100V
C101,120,201,220		
	1-109-550-00	CAP,MICA 430PF 5% 100V
C104,105,114,115,133, 134,139,140,146,147, 148,156,157,165,166, 204,205,214,215,233, 234,239,240,246,247, 248,256,257,265,266		
	1-123-318-00	CAP,ELECT 33 16V
C141,149,150,241,249, 250		
	1-123-332-00	CAP,ELECT 47 25V
C143,145,243,245		
	1-123-333-00	CAP,ELECT 100 25V
C171,172,173,174,175, 176,177,271,272,273, 274,275,276,277		
	1-123-356-00	CAP,ELECT 10 50V
C108,208	1-130-467-00	CAP,MYLAR 470PF 5% 50V
C119,137,151,219,237, 251		
	1-130-470-00	CAP,MYLAR 820PF 5% 50V
C136,236	1-130-473-00	CAP,MYLAR 0.0015 5% 50V
C116,216	1-130-474-00	CAP,MYLAR 0.0018 5% 50V

Ref.No. or Q'ty	Part No.	Description
(AU-27 BOARD,CARD RACK)		
C113,129,132,213,229, 232		
	1-130-475-00	CAP,MYLAR 0.0022 5% 50V
C152,252 (May be used or not.)		
	1-130-475-00	CAP,MYLAR 0.0022 5% 50V
C154,179,254,279		
	1-130-477-00	CAP,MYLAR 0.0033 5% 50V
C112,212	1-130-481-00	CAP,MYLAR 0.0068 5% 50V
C168,268	1-130-482-00	CAP,MYLAR 0.0082 5% 50V
C159,259	1-130-620-00	CAP,FILM 0.01 5% 50V
C110,111,130,131,210, 211,230,231		
	1-130-624-00	CAP,FILM 0.022 5% 50V
C169,269	1-130-632-00	CAP,FILM 0.1 5% 50V
C117,135,217,235		
	1-131-347-00	CAP,TANT 0.1 10% 35V
C160,260	1-131-369-00	CAP,TANT 4.7 10% 16V
C118,153,170,218,253, 270		
	1-131-371-00	CAP,TANT 10 10% 16V
C178,278	1-131-373-00	CAP,TANT 22 10% 16V
C103,203	1-131-381-00	CAP,TANT 47 10% 10V
C142,144,242,244		
	1-161-051-00	CAP,CERAMIC 0.01 10% 50V
RV111,211		
	1-224-937-00	RES,VAR,METAL 1K
RV101,102,104,107,110, 201,202,204,207,210		
	1-224-940-00	RES,VAR,METAL 10K
RV103,105,106,203,205, 206		
	1-224-941-00	RES,VAR,METAL 20K
RV108,109,208,209		
	1-228-580-00	RES,VAR,COMP 20K(B)

Ref.No. or Q'ty	Part No.	Description
(AU-27 BOARD,CARD RACK)		
R102,170,202,270	1-247-767-00	RES,CARBON 2.2 5% 1/6W
R105,106,115,116,119, 125,135,136,141,142, 149,154,160,168,169, 172,182,183,194,205, 206,215,216,219,225, 235,236,241,242,249, 254,260,268,269,272, 282,283,294,331	1-247-807-00	RES,CARBON 100 5% 1/6W
R139,239	1-247-815-00	RES,CARBON 220 5% 1/6W
R188,288	1-247-821-00	RES,CARBON 390 5% 1/6W
R104,204	1-247-828-00	RES,CARBON 750 5% 1/6W
R114,134,147,148,199, 214,234,247,248,299	1-247-831-00	RES,CARBON 1K 5% 1/6W
R118,178,218,278	1-247-835-00	RES,CARBON 1.5K 5% 1/6W
R110,210	1-247-836-00	RES,CARBON 1.6K 5% 1/6W
R101,111,121,130,138, 201,211,221,230,238	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R145,165,245,265	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R167,267	1-247-846-00	RES,CARBON 4.3K 5% 1/6W
R117,120,137,140,161, 217,220,237,240,261	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R150,151,250,251	1-247-851-00	RES,CARBON 6.8K 5% 1/6W
R157,162,257,262	1-247-853-00	RES,CARBON 8.2K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AU-27 BOARD,CARD RACK)		
R124,156,158,187,190, 191,192,193,195,196, 224,256,258,287,290, 291,293,311,312,313, 314,315,316,317,321, 322,323,324,325,326, 327	1-247-855-00	RES,CARBON 10K 5% 1/6W
R198,298	1-247-857-00	RES,CARBON 12K 5% 1/6W
R171,271	1-247-860-00	RES,CARBON 16K 5% 1/6W
R107,164,207,264	1-247-861-00	RES,CARBON 18K 5% 1/6W
R175,181,275,281	1-247-863-00	RES,CARBON 22K 5% 1/6W
R108,208	1-247-864-00	RES,CARBON 24K 5% 1/6W
R174,274	1-247-867-00	RES,CARBON 33K 5% 1/6W
R197,297	1-247-870-00	RES,CARBON 43K 5% 1/6W
R122,222	1-247-871-00	RES,CARBON 47K 5% 1/6W
R144,244	1-247-877-00	RES,CARBON 82K 5% 1/6W
R123,146,180,185,189, 223,246,280,285,289	1-247-879-00	RES,CARBON 100K 5% 1/6W
R284	1-247-881-00	RES,CARBON 120K 5% 1/6W
R112,131,212,231	1-247-882-00	RES,CARBON 130K 5% 1/6W
R163,263	1-247-883-00	RES,CARBON 150K 5% 1/6W
R184,186,286	1-247-887-00	RES,CARBON 220K 5% 1/6W
R113,133,213,233	1-247-890-00	RES,CARBON 300K 5% 1/6W
R176,276	1-247-895-00	RES,CARBON 470K 5% 1/6W
R155,255	1-247-899-00	RES,CARBON 680K 5% 1/6W
R152,153,252,253	1-247-903-00	RES,CARBON 1M 5% 1/6W

Ref.No. or Qty	Part No.	Description
(AU-27 BOARD,CARD RACK)		
LV102,202	1-407-293-00	INDUCTOR,VAR,1.5mH
LV101,201	1-407-297-00	INDUCTOR,VAR,3.5mH
L102,202	1-407-494-00	INDUCTOR,MICRO,1.5mH 5%
TH101,201	1-800-200-00	THERMISTOR,S-3K
TPE101,106,107,108,109, 201,206,207,208,209	() 3-673-772-01	TERMINAL,TP
TP101,102,103,104,105, 106,107,108,109,201, 202,203,204,205,206, 207,208,209	() 3-673-772-41	TERMINAL,TP
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD
1pc	() 3-674-611-00	LABEL(AU-27),PC BOARD
1pc	7-621-981-15	SCREW,PSW 2.6x6
2pcs	() 7-626-317-21	PIN,SPRING 2.5x8
D101,102,201,202	8-719-815-80	DIODE 1S1587
D1	8-719-911-06	DIODE 1SS106
Q102,202	8-729-373-92	TRANSISTOR 2SB739
Q101,201	8-729-378-84	TRANSISTOR 2SD788
IC106,206	8-759-178-05	IC UPC78L05
IC101,201	8-759-302-65	IC HA12017
IC102,104,105,108,109, 202,204,205,208,209	8-759-745-59	IC NJM4559D

Ref.No. or Qty	Part No.	Description
(AU-27 BOARD,CARD RACK)		
IC107,207	8-759-745-60	IC NJM4560D
IC113,213	8-759-900-00	IC SN74LS00N,TTL
IC1,110,111,112,210,211, 212	8-759-921-91	IC TL191CN

AE-03 BOARD (BVH-2000PS-00,02,10,12/2180PS-00,02)

1pc (for 00/02/10/12 model)

() A-6013-051-B COMPLETE PCB,AE-03
(This assembly includes the following parts.)

1pc () X-3673-641-0 PLATE ASSY,SHIELD

C185,186	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C202	1-107-075-00	CAP,MICA 39PF 5% 50V
C148	1-107-077-00	CAP,MICA 47PF 5% 50V
C150	1-107-081-00	CAP,MICA 68PF 5% 50V
C203	1-107-158-00	CAP,MICA 30PF 5% 500V
C4,15	1-107-210-00	CAP,MICA 22PF 5% 500V
C12	1-109-546-00	CAP,MICA 300PF 5% 100V
C153	1-109-547-00	CAP,MICA 330PF 5% 100V
C2	1-109-550-00	CAP,MICA 430PF 5% 100V
C147	1-109-554-00	CAP,MICA 510PF 5% 100V

C3,5,9,11,19,20,25,26,
27,28,35,36,48,49,61,
63,70,71,73,74,141
1-123-332-00 CAP,ELECT 47 25V

Ref.No. or Qty	Part No.	Description
(AE-03 BOARD,2000PS-00,02,10,12/ 2180PS-00,02,CARD RACK)		
C23,24,41,42,200,201	1-123-333-00	CAP,ELECT 100 25V
C16,17,21,22,56,57,62, 67,68,77,80,81,181,182	1-123-356-00	CAP,ELECT 10 50V
C33	1-130-467-00	CAP,MYLAR 470PF 5% 50V
C149	1-130-468-00	CAP,MYLAR 560PF 5% 50V
C44	1-130-470-00	CAP,MYLAR 820PF 5% 50V
C32	1-130-472-00	CAP,MYLAR 0.0012 5% 50V
C8	1-130-473-00	CAP,MYLAR 0.0015 5% 50V
C10,146	1-130-474-00	CAP,MYLAR 0.0018 5% 50V
C38,46,65	1-130-475-00	CAP,MYLAR 0.0022 5% 50V
C14	1-130-476-00	CAP,MYLAR 0.0027 5% 50V
C45,69,76	1-130-477-00	CAP,MYLAR 0.0033 5% 50V
C154	1-130-480-00	CAP,MYLAR 0.0056 5% 50V
C64,151	1-130-481-00	CAP,MYLAR 0.0068 5% 50V
C51	1-130-620-00	CAP,FILM 0.01 5% 50V
C37,39	1-130-624-00	CAP,FILM 0.022 5% 50V
C184	1-131-295-61	CAP,TANT 100 10% 6.3V
C13,34,66	1-131-345-00	CAP,TANT 0.47 10% 35V
C29	1-131-347-00	CAP,TANT 1 10% 35V
C31	1-131-349-00	CAP,TANT 2.2 10% 35V
C6,18,52,75,145,189,190	1-131-351-00	CAP,TANT 4.7 10% 35V
C72	1-131-381-00	CAP,TANT 47 10% 10V
C7,55,140	1-136-156-00	CAP,FILM 0.018 5% 50V
C1,54,79,83,84	1-161-055-00	CAP,CERAMIC 0.022 10% 50V

Ref.No. or Qty	Part No.	Description
(AE-03 BOARD,2000PS-00,02,10,12/ 2180PS-00,02,CARD RACK)		
R128	1-215-394-00	RES,METAL 75 1% 1/6W
R246	1-215-395-00	RES,METAL 82 1% 1/6W
R274	1-215-411-00	RES,METAL 390 1% 1/6W
R249	1-215-413-00	RES,METAL 470 1% 1/6W
R273	1-215-414-00	RES,METAL 510 1% 1/6W
R138	1-215-435-00	RES,METAL 3.9K 1% 1/6W
R119	1-215-442-00	RES,METAL 7.5K 1% 1/6W
R248	1-215-445-00	RES,METAL 10K 1% 1/6W
RV12	1-224-937-00	RES,VAR,METAL 1K
RV3,4,6,9,13,16,17,32	1-224-940-00	RES,VAR,METAL 10K
RV1,2,5,8	1-224-941-00	RES,VAR,METAL 20K
RV15,18	1-226-095-00	RES,VAR,METAL 200K
RV28,29	1-228-580-00	RES,VAR,COMP 20K(B)
R81,253,264,265,266,283	1-247-767-00	RES,CARBON 2.2 5% 1/6W
R27,28,37,38,79,80,86, 100,101,244,277,278	1-247-799-00	RES,CARBON 47 5% 1/6W
R5,12,17,20,22,30,33,35, 48,49,55,56,57,62,63, 82,94,95,107,115,118, 321,323	1-247-807-00	RES,CARBON 100 5% 1/6W
R279	1-247-819-00	RES,CARBON 330 5% 1/6W
R135	1-247-823-00	RES,CARBON 470 5% 1/6W
R6,39,41,67,68	1-247-827-00	RES,CARBON 680 5% 1/6W
R18,44,66	1-247-831-00	RES,CARBON 1K 5% 1/6W
R123	1-247-834-00	RES,CARBON 1.3K 5% 1/6W
R34	1-247-835-00	RES,CARBON 1.5K 5% 1/6W
R2,16,24,25,59,69,131, 134,275	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R122,136	1-247-840-00	RES,CARBON 2.4K 5% 1/6W
R53	1-247-845-00	RES,CARBON 3.9K 5% 1/6W

Ref. No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-00, 02, 10, 12/ 2180PS-00, 02, CARD RACK)		
R73, 141, 276	1-247-847-00	RES, CARBON 4. 7K 5% 1/6W
R31	1-247-850-00	RES, CARBON 6. 2K 5% 1/6W
R43, 51	1-247-851-00	RES, CARBON 6. 8K 5% 1/6W
R11, 60, 61, 102	1-247-852-00	RES, CARBON 7. 5K 5% 1/6W
R47, 74, 77	1-247-853-00	RES, CARBON 8. 2K 5% 1/6W
R13, 14, 21, 23, 45, 46, 144, 145, 148, 149, 150, 151, 152, 153, 154, 155, 156, 161, 162, 163, 164, 285, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317	1-247-855-00	RES, CARBON 10K 5% 1/6W
R132	1-247-857-00	RES, CARBON 12K 5% 1/6W
R83	1-247-860-00	RES, CARBON 16K 5% 1/6W
R10, 32, 76	1-247-861-00	RES, CARBON 18K 5% 1/6W
R4, 90, 92, 133	1-247-863-00	RES, CARBON 22K 5% 1/6W
R97	1-247-865-00	RES, CARBON 27K 5% 1/6W
R129	1-247-866-00	RES, CARBON 30K 5% 1/6W
R87, 96, 146	1-247-867-00	RES, CARBON 33K 5% 1/6W
R126, 139	1-247-869-00	RES, CARBON 39K 5% 1/6W
R1	1-247-871-00	RES, CARBON 47K 5% 1/6W
R124, 137	1-247-873-00	RES, CARBON 56K 5% 1/6W
R64	1-247-875-00	RES, CARBON 68K 5% 1/6W
R112	1-247-876-00	RES, CARBON 75K 5% 1/6W
R52, 98, 109, 130, 250, 252, 286	1-247-879-00	RES, CARBON 100K 5% 1/6W
R15	1-247-880-00	RES, CARBON 110K 5% 1/6W
R99	1-247-881-00	RES, CARBON 120K 5% 1/6W

Ref. No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-00, 02, 10, 12/ 2180PS-00, 02, CARD RACK)		
R78, 251	1-247-883-00	RES, CARBON 150K 5% 1/6W
R93	1-247-886-00	RES, CARBON 200K 5% 1/6W
R54, 245, 287	1-247-887-00	RES, CARBON 220K 5% 1/6W
R65	1-247-895-00	RES, CARBON 470K 5% 1/6W
R19	1-247-898-00	RES, CARBON 620K 5% 1/6W
R42	1-247-899-00	RES, CARBON 680K 5% 1/6W
R40, 50	1-247-903-00	RES, CARBON 1M 5% 1/6W
LV1	1-407-293-00	INDUCTOR, VAR, 1. 5mH
LV2	1-407-297-00	INDUCTOR, VAR, 3. 5mH
SW3	1-552-430-21	SWITCH, SLIDE
SW1, 2	1-553-440-00	SWITCH, TOGGLE
TP1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 17, 18, 19		
TPE1, 2, 4, 7, 8, 9, 10, 11	() 3-657-703-01	TERMINAL, TP
1pc	() 3-673-865-00	LEVER, WITH PIN
1pc	() 3-673-867-00	PLATE, INDICATION, PC BOARD
1pc	() 3-674-612-00	LABEL (AE-03), PC BOARD
4pcs	7-621-981-15	SCREW, PSW2. 6x6
2pcs	() 7-626-317-21	PIN, SPRING 2. 5x8
D5	8-719-156-07	DIODE RD5. 6E-B
D1	8-719-815-55	DIODE 1S1555
D3, 4	8-719-815-80	DIODE 1S1587
Q7, 9	8-729-117-54	TRANSISTOR 2SA1175
Q2, 4	8-729-177-32	TRANSISTOR 2SD773
Q1, 15	8-729-201-05	TRANSISTOR 2SC2878-B
Q3, 5, 8	8-729-373-92	TRANSISTOR 2SB739
IC34	8-759-178-05	IC UPC78L05
IC15	8-759-208-06	IC TC4051BPHB
IC1, 33	8-759-302-65	IC HA12017
IC2, 6, 8, 9, 11, 14	8-759-745-59	IC NJM4559D

Ref.No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-00, 02, 10, 12/ 2180PS-00, 02, CARD RACK)		
IC5	8-759-745-60	IC NJM4560D
IC21	8-759-900-00	IC SN74LS00N, TTL
IC22	8-759-900-04	IC SN74LS04N, TTL
IC19	8-759-901-25	IC SN74LS125AN, TTL
IC18	8-759-901-26	IC SN74LS126AN, TTL
IC17	8-759-908-20	IC TL820CN
IC3, 4, 7, 10, 12	8-759-921-91	IC TL191CN
IC16	8-759-990-82	IC TL082CP
Q6	8-769-194-00	TRANSISTOR 2SK43-4
<hr/> AE-03 BOARD (BVH-2000PS-04, 14/2180PS-04, CARD RACK) <hr/>		
1pc (for 04/14 model)	() A-6013-055-A COMPLETE PCB, AE-03 (This assembly includes the following parts.)	
1pc	() X-3673-641-0	PLATE ASSY, SHIELD
C185, 186	1-102-106-00	CAP, CERAMIC 100PF 10% 50V
C202	1-107-075-00	CAP, MICA 39PF 5% 50V
C175	1-107-077-00	CAP, MICA 47PF 5% 50V
C150	1-107-081-00	CAP, MICA 68PF 5% 50V
C174	1-107-085-00	CAP, MICA 100PF 5% 50V
C94, 171	1-107-087-00	CAP, MICA 120PF 5% 50V
C180	1-107-089-00	CAP, MICA 150PF 5% 50V
C166, 188	1-107-091-00	CAP, MICA 180PF 5% 50V
C203	1-107-158-00	CAP, MICA 30PF 5% 500V
C104	1-107-202-00	CAP, MICA 10PF 5% 500V
C4, 15, 161	1-107-210-00	CAP, MICA 22PF 5% 500V
C172	1-108-560-00	CAP, MYLAR 0.0016 5% 50V

Ref.No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-04, 14/2180PS-04, CARD RACK) C148 (One of the following capacitors is used.)		
	1-109-532-00	CAP, MICA 75PF 5% 100V
	1-107-085-00	CAP, MICA 100PF 5% 50V
C12	1-109-546-00	CAP, MICA 300PF 5% 100V
C157, 165	1-109-549-00	CAP, MICA 390PF 5% 100V
C2, 101	1-109-550-00	CAP, MICA 430PF 5% 100V
C3, 5, 9, 11, 19, 20, 25, 26, 27, 28, 35, 36, 48, 49, 61, 63, 70, 71, 73, 74, 89, 90, 95, 96, 102, 103, 110, 111, 120, 121, 122, 123, 131, 132, 141, 142	1-123-332-00	CAP, ELECT 47 25V
C23, 24, 41, 42, 118, 119, 137, 138, 200, 201	1-123-333-00	CAP, ELECT 100 25V
C16, 17, 21, 22, 56, 57, 62, 67, 68, 77, 80, 81, 82, 98, 99, 100, 116, 117, 125, 126, 168, 169, 181, 182	1-123-356-00	CAP, ELECT 10 50V
C33, 92, 129, 164, 183	1-130-467-00	CAP, MYLAR 470PF 5% 50V
C149	1-130-468-00	CAP, MYLAR 560PF 5% 50V
C153	1-130-469-00	CAP, MYLAR 680PF 5% 50V
C44, 86, 114	1-130-470-00	CAP, MYLAR 820PF 5% 50V
C64	1-130-471-00	CAP, MYLAR 0.001 5% 50V
C32, 128	1-130-472-00	CAP, MYLAR 0.0012 5% 50V
C8, 176	1-130-473-00	CAP, MYLAR 0.0015 5% 50V
C10, 146	1-130-474-00	CAP, MYLAR 0.0018 5% 50V
C38, 46, 88, 109, 113, 134	1-130-475-00	CAP, MYLAR 0.0022 5% 50V
C14	1-130-476-00	CAP, MYLAR 0.0027 5% 50V
C45, 69, 76, 87, 158	1-130-477-00	CAP, MYLAR 0.0033 5% 50V

Ref.No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-04, 14/2180PS-04, CARD RACK)		
C154, 177	1-130-480-00	CAP, MYLAR 0.0056 5% 50V
C106, 151	1-130-481-00	CAP, MYLAR 0.0068 5% 50V
C159	1-130-482-00	CAP, MYLAR 0.0082 5% 50V
C51, 93	1-130-620-00	CAP, FILM 0.01 5% 50V
C65	1-130-621-00	CAP, FILM 0.012 5% 50V
C162	1-130-622-00	CAP, FILM 0.015 5% 50V
C37, 39, 133, 135	1-130-624-00	CAP, FILM 0.022 5% 50V
C160, 173	1-130-632-00	CAP, FILM 0.1 5% 50V
C184	1-131-295-61	CAP, TANT 100 10% 6.3V
C156, 170	1-131-344-00	CAP, TANT 0.33 10% 35V
C13, 34, 66	1-131-345-00	CAP, TANT 0.47 10% 35V
C179	1-131-346-00	CAP, TANT 0.68 10% 35V
C29, 107, 124, 130	1-131-347-00	CAP, TANT 1 10% 35V
C178	1-131-348-00	CAP, TANT 1.5 10% 35V
C31, 127	1-131-349-00	CAP, TANT 2.2 10% 35V
C163	1-131-350-00	CAP, TANT 3.3 10% 35V
C6, 18, 52, 75, 91, 112, 145, 189, 190	1-131-351-00	CAP, TANT 4.7 10% 35V
C72	1-131-381-00	CAP, TANT 47 10% 10V
C7, 105, 108, 140	1-136-156-00	CAP, FILM 0.018 5% 50V
C55	1-136-160-00	CAP, FILM 0.039 5% 50V
C147	1-136-166-00	CAP, FILM 0.12 5% 50V
C1, 54, 78, 79, 83, 84, 115, 143	1-161-055-00	CAP, CERAMIC 0.022 10% 50V
R128	1-215-394-00	RES, METAL 75 1% 1/6W
R246	1-215-395-00	RES, METAL 82 1% 1/6W
R274	1-215-411-00	RES, METAL 390 1% 1/6W
R249	1-215-413-00	RES, METAL 470 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-04, 14/2180PS-04, CARD RACK)		
R273	1-215-414-00	RES, METAL 510 1% 1/6W
R138	1-215-435-00	RES, METAL 3.9K 1% 1/6W
R119	1-215-442-00	RES, METAL 7.5K 1% 1/6W
R248	1-215-445-00	RES, METAL 10K 1% 1/6W
RV12, 35, 38	1-224-937-00	RES, VAR, METAL 1K
RV20	1-224-939-00	RES, VAR, METAL 5K
RV3, 4, 6, 9, 13, 16, 17, 19, 22, 24, 25, 27, 32, 34	1-224-940-00	RES, VAR, METAL 10K
RV1, 2, 5, 8, 23, 26, 33, 36	1-224-941-00	RES, VAR, METAL 20K
RV37	1-224-943-00	RES, VAR, METAL 100K
RV15, 18	1-226-095-00	RES, VAR, METAL 200K
RV28, 29, 30, 31	1-230-742-11	RES, VAR, CARBON 20K(B)
R81	1-247-767-00	RES, CARBON 2.2 5% 1/6W
R27, 28, 37, 38, 79, 80, 86, 100, 101, 173, 174, 185, 186, 210, 211, 231, 232, 244, 267, 268, 277, 278	1-247-799-00	RES, CARBON 47 5% 1/6W
R5, 12, 17, 20, 22, 30, 33, 35, 48, 49, 55, 56, 57, 62, 63, 82, 94, 95, 107, 115, 118, 171, 180, 181, 192, 196, 201, 202, 203, 221, 222, 228, 229, 230, 236, 240, 321, 322, 323	1-247-807-00	RES, CARBON 100 5% 1/6W
R206, 279	1-247-819-00	RES, CARBON 330 5% 1/6W
R200	1-247-821-00	RES, CARBON 390 5% 1/6W
R135	1-247-823-00	RES, CARBON 470 5% 1/6W
R6, 39, 41, 67, 68, 195, 212, 218, 241, 243	1-247-827-00	RES, CARBON 680 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-04, 14/2180PS-04, CARD RACK)		
R18, 44, 66, 214, 239	1-247-831-00	RES, CARBON 1K 5% 1/6W
R123	1-247-834-00	RES, CARBON 1.3K 5% 1/6W
R34, 255	1-247-835-00	RES, CARBON 1.5K 5% 1/6W
R2, 16, 24, 25, 59, 69, 131, 134, 187, 197, 207, 233, 242, 275	1-247-839-00	RES, CARBON 2.2K 5% 1/6W
R122, 136	1-247-840-00	RES, CARBON 2.4K 5% 1/6W
R177	1-247-841-00	RES, CARBON 2.7K 5% 1/6W
R97	1-247-843-00	RES, CARBON 3.3K 5% 1/6W
R53, 226	1-247-845-00	RES, CARBON 3.9K 5% 1/6W
R73, 141, 160, 204, 205, 276	1-247-847-00	RES, CARBON 4.7K 5% 1/6W
R31	1-247-850-00	RES, CARBON 6.2K 5% 1/6W
R43, 51, 213, 224, 281	1-247-851-00	RES, CARBON 6.8K 5% 1/6W
R11, 60, 61, 102, 234, 235	1-247-852-00	RES, CARBON 7.5K 5% 1/6W
R47, 74, 77, 165, 168, 220, 272	1-247-853-00	RES, CARBON 8.2K 5% 1/6W
R13, 14, 21, 23, 45, 46, 87, 144, 145, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 161, 162, 163, 164, 208, 209, 215, 216, 258, 263, 264, 266, 270, 271, 283, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317	1-247-855-00	RES, CARBON 10K 5% 1/6W
R132, 175	1-247-857-00	RES, CARBON 12K 5% 1/6W
R261, 282	1-247-859-00	RES, CARBON 15K 5% 1/6W
R83, 172	1-247-860-00	RES, CARBON 16K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-04, 14/2180PS-04, CARD RACK)		
R10, 32, 76, 167, 178, 193	1-247-861-00	RES, CARBON 18K 5% 1/6W
R4, 133, 254	1-247-863-00	RES, CARBON 22K 5% 1/6W
R194	1-247-864-00	RES, CARBON 24K 5% 1/6W
R179	1-247-865-00	RES, CARBON 27K 5% 1/6W
R129	1-247-866-00	RES, CARBON 30K 5% 1/6W
R146, 183, 188	1-247-867-00	RES, CARBON 33K 5% 1/6W
R126, 139	1-247-869-00	RES, CARBON 39K 5% 1/6W
R256	1-247-870-00	RES, CARBON 43K 5% 1/6W
R124, 137	1-247-873-00	RES, CARBON 56K 5% 1/6W
R189, 262	1-247-874-00	RES, CARBON 62K 5% 1/6W
R64, 265	1-247-875-00	RES, CARBON 68K 5% 1/6W
R112	1-247-876-00	RES, CARBON 75K 5% 1/6W
R1, 52, 98, 109, 130, 176, 225, 237, 250, 252, 257, 260, 286	1-247-879-00	RES, CARBON 100K 5% 1/6W
R15	1-247-880-00	RES, CARBON 110K 5% 1/6W
R99	1-247-881-00	RES, CARBON 120K 5% 1/6W
R78, 93, 96, 169, 251	1-247-883-00	RES, CARBON 150K 5% 1/6W
R9, 54, 198, 227, 245, 259, 287	1-247-887-00	RES, CARBON 220K 5% 1/6W
R199, 238	1-247-891-00	RES, CARBON 330K 5% 1/6W
R65	1-247-895-00	RES, CARBON 470K 5% 1/6W
R269	1-247-897-00	RES, CARBON 560K 5% 1/6W
R19	1-247-898-00	RES, CARBON 620K 5% 1/6W
R42, 219	1-247-899-00	RES, CARBON 680K 5% 1/6W
R40, 50, 217, 223	1-247-903-00	RES, CARBON 1M 5% 1/6W
R90, 92	1-249-429-11	RES, CARBON 10K 5% 1/6W
LV1, 6	1-407-293-00	INDUCTOR, VAR, 1.5mH
LV2, 3, 4, 5	1-407-297-00	INDUCTOR, VAR, 3.5mH

Ref. No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-04, 14/2180PS-04, CARD RACK)		
SW3	1-552-430-21	SWITCH, SLIDE
SW1, 2	1-553-440-00	SWITCH, TOGGLE
TP1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19		
TPE1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13		
	() 3-657-703-01	TERMINAL, TP
1pc	() 3-673-865-00	LEVER, WITH PIN
1pc	() 3-673-867-00	PLATE, INDICATION, PC BOARD
1pc	() 3-674-657-00	LABEL (AE-03), PC BOARD
4pcs	7-621-981-15	SCREW, PSW2. 6x6
2pcs	() 7-626-317-21	PIN, SPRING 2.5x8
D5	8-719-156-07	DIODE RD5.6E-B
D1	8-719-815-55	DIODE 1S1555
D3, 4, 6, 7	8-719-815-80	DIODE 1S1587
Q7, 9	8-729-117-54	TRANSISTOR 2SA1175
Q2, 4, 11, 13		
	8-729-177-32	TRANSISTOR 2SD773
Q1, 15	8-729-201-05	TRANSISTOR 2SC2878-B
Q3, 5, 8, 12, 14		
	8-729-373-92	TRANSISTOR 2SB739
IC35	8-759-045-38	IC MC14538BCP, CMOS
IC34	8-759-178-05	IC UPC78L05
IC15	8-759-208-06	IC TC4051BPHB
IC1, 26, 33		
	8-759-302-65	IC HA12017
IC2, 6, 8, 9, 11, 14, 23, 24, 27, 30, 32		
	8-759-745-59	IC NJM4559D
IC5, 29	8-759-745-60	IC NJM4560D
IC21	8-759-900-00	IC SN74LS00N, TTL
IC22	8-759-900-04	IC SN74LS04N, TTL
IC20	8-759-900-08	IC SN74LS08N, TTL
IC19	8-759-901-25	IC SN74LS125AN, TTL

Ref. No. or Q'ty	Part No.	Description
(AE-03 BOARD, 2000PS-04, 14/2180PS-04, CARD RACK)		
IC18	8-759-901-26	IC SN74LS126AN, TTL
IC17	8-759-908-20	IC TL820CN
IC3, 4, 7, 10, 12, 13, 25, 28, 31	8-759-921-91	IC TL191CN
IC16	8-759-990-82	IC TL082CP
Q6	8-769-194-00	TRANSISTOR 2SK43-4

Ref.No. or Q'ty	Part No.	Description
<u>EQ-02 BOARD (BVH-2000PS,2180PS/CARD RACK)</u>		
1pc	() A-6011-067-D	COMPLETE PCB,EQ-02 WITH EQ-11
1pc	() A-6011-095-B	COMPLETE PCB,EQ-02 WITH EQ-11
(For BVH-2000PS 10,12,14 model)		
(This assembly Includes the following parts.)		
1pc	() X-3673-641-0	PLATE ASSY,SHIELD
C98,107	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C15,58,119,120,127,130	1-107-078-00	CAP,MICA 51PF 5% 50V
C4,6,9,13,156,157,158, 159	1-107-081-00	CAP,MICA 68PF 5% 50V
C73	1-107-082-00	CAP,MICA 75PF 5% 50V
C99	1-107-157-00	CAP,MICA 27PF 5% 500V
C160	1-107-158-00	CAP,MICA 30PF 5% 500V
C142	1-107-202-00	CAP,MICA 10PF 5% 500V
C32	1-107-205-00	CAP,MICA 13PF 5% 500V
C60	1-107-208-00	CAP,MICA 18PF 5% 500V
C131	1-109-535-00	CAP,MICA 100PF 5% 100V
C132	1-109-538-00	CAP,MICA 130PF 5% 100V
C38,95	1-109-539-00	CAP,MICA 150PF 5% 100V
C134,135	1-123-380-00	CAP,ELECT 1 100V
C136	1-123-567-00	CAP,ELECT 2200 10V
C52,57	1-123-839-00	CAP,ELECT 1000 16V
C1,7,10,24,31,33,40,51, 68,76,79,96,104,121, 129,138,140	1-124-445-00	CAP,ELECT 100 16V
C54,55	1-124-474-00	CAP,ELECT 47 16V
C46,82,108,113,114	1-124-481-00	CAP,ELECT 22 35V
C111	1-124-656-00	CAP,ELECT, NONPOLAR 2.2 50V
C92	1-130-475-00	CAP,MYLAR 0.0022 5% 50V
C122,123	1-130-477-00	CAP,MYLAR 0.0033 5% 50V
C102	1-130-478-00	CAP,MYLAR 0.0039 5% 50V

Ref.No. or Q'ty	Part No.	Description
<u>(EQ-02 BOARD, BVH-2000PS,2180PS/CARD RACK)</u>		
C133	1-130-481-00	CAP,MYLAR 0.0068 5% 50V
C100	1-130-485-00	CAP,MYLAR 0.015 5% 50V
C103	1-130-487-00	CAP,MYLAR 0.022 5% 50V
C125	1-130-495-00	CAP,MYLAR 0.1 5% 50V
CV1	1-141-256-00	CAP,TRIMMER 8PF
C3,5,8,12,19,28,30,36, 37,39,42,43,44,45,59, 62,66,69,71,78,84,85, 87,89,93,97,105,112, 115,117,126,147	1-161-051-00	CAP,CERAMIC 0.01 10% 50V
C86,152,153,154,155	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
C53,56,137	1-161-057-00	CAP,CERAMIC 0.033 10% 50V
C150,151	1-161-483-00	CAP,CERAMIC 0.1 10% 50V
C2,11,14,26,27,29,34,35, 41,47,50,61,63,64,65, 67,70,72,77,80,83,88, 90,91,94,101,106,109, 110,116,118,124,128, 139,170	1-162-596-00	CAP,CERAMIC 0.022 25V
R301,302,303,304	1-215-391-00	RES,METAL 56 1% 1/6W
R9,20,33,44	1-215-397-00	RES,METAL 100 1% 1/6W
R90,167	1-215-401-00	RES,METAL 150 1% 1/6W
R297	1-215-403-00	RES,METAL 180 1% 1/6W
R133	1-215-404-00	RES,METAL 200 1% 1/6W
R8,19,32,43	1-215-406-00	RES,METAL 240 1% 1/6W
R317,318,319,320	1-215-415-00	RES,METAL 560 1% 1/6W
R112	1-215-419-00	RES,METAL 820 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(EQ-02 BOARD, BVH-2000PS, 2180PS/CARD RACK)		
R253	1-215-424-00	RES, METAL 1.3K 1% 1/6W
R191	1-215-425-00	RES, METAL 1.5K 1% 1/6W
R254	1-215-428-00	RES, METAL 2K 1% 1/6W
R211, R220	1-215-441-00	RES, METAL 6.8K 1% 1/6W
R296	1-215-443-00	RES, METAL 8.2K 1% 1/6W
R321	1-215-445-00	RES, METAL 10K 1% 1/6W
RV36, 37	1-224-926-00	RES, VAR, METAL 500
RV9, 10, 11, 12	1-224-935-00	RES, VAR, METAL 200
RV31, 32, 33, 34	1-224-936-00	RES, VAR, METAL 500
RV13, 14, 16, 18	1-224-937-00	RES, VAR, METAL 1K
RV27	1-224-938-00	RES, VAR, METAL 2K
RV35	1-224-941-00	RES, VAR, METAL 20K
RV26	1-224-942-00	RES, VAR, METAL 50K
RV22	1-230-837-11	RES, ADJ, CERMET 100
RV23, 25, 28	1-230-842-11	RES, ADJ, CERMET 5K
RV24	1-230-843-11	RES, ADJ, CERMET 10K
RV30	1-230-844-11	RES, ADJ, CERMET 20K
RV1, 3, 5, 7	1-230-738-00	RES, VAR, COMP 200(B)
RV2, 4, 6, 8	1-230-740-00	RES, VAR, COMP 5K(B)
R7, 18, 31, 42, 101	1-247-791-00	RES, CARBON 22 5% 1/6W
R85, 91, 108, 109, 134, 140, 142, 157, 158, 168, 170, 176, 197, 324, 325	1-247-795-00	RES, CARBON 33 5% 1/6W
R5, 16, 30, 41, 121, 131, 163	1-247-800-00	RES, CARBON 51 5% 1/6W
R146, 147, 188	1-247-804-00	RES, CARBON 75 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(EQ-02 BOARD, BVH-2000PS, 2180PS/CARD RACK)		
R1, 3, 12, 14, 25, 27, 36, 39, 82, 92, 106, 113, 114, 115, 122, 123, 124, 127, 128, 129, 136, 137, 138, 148, 150, 155, 156, 166, 179, 180, 189, 210, 214, 215, 230, 251, 256, 286, 293, 359	1-247-807-00	RES, CARBON 100 5% 1/6W
R285	1-247-810-00	RES, CARBON 130 5% 1/6W
R308	1-247-811-00	RES, CARBON 150 5% 1/6W
R102, 110, 120, 149, 294	1-247-814-00	RES, CARBON 200 5% 1/6W
R94, 111, 139, 171, 172, 175, 212, 282, 283, 287	1-247-818-00	RES, CARBON 300 5% 1/6W
R2, 4, 13, 15, 26, 28, 37, 38, 97, 118, 132, 154	1-247-819-00	RES, CARBON 330 5% 1/6W
R306	1-247-820-00	RES, CARBON 360 5% 1/6W
R55, 60, 151, 258, 264	1-247-821-00	RES, CARBON 390 5% 1/6W
R162	1-247-822-00	RES, CARBON 430 5% 1/6W
R280	1-247-823-00	RES, CARBON 470 5% 1/6W
R213, 252	1-247-824-00	RES, CARBON 510 5% 1/6W
R144	1-247-825-00	RES, CARBON 560 5% 1/6W
R99, 100, 107, 116, 135, 141	1-247-827-00	RES, CARBON 680 5% 1/6W
R190	1-247-828-00	RES, CARBON 750 5% 1/6W
R53, 54, 57, 58, 259, 260, 262, 263, 281, 284	1-247-829-00	RES, CARBON 820 5% 1/6W
R87, 89, 98, 104, 105, 125, 126, 160, 161, 164, 169, 174, 177, 192, 194, 198, 204, 208, 209, 217, 219, 228, 234, 241, 250, 225	1-247-831-00	RES, CARRON 1K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(EQ-02 BOARD,BVH-2000PS,2180PS/CARD RACK)		
R61,130,270,271	1-247-832-00	RES,CARBON 1.1K 5% 1/6W
R307	1-247-834-00	RES,CARBON 1.3K 5% 1/6W
R6,17,29,40,56,59,261, 265	1-247-836-00	RES,CARBON 1.6K 5% 1/6W
R227	1-247-837-00	RES,CARBON 1.8K 5% 1/6W
R193,202,203,226,231, 248,257,289	1-247-838-00	RES,CARBON 2K 5% 1/6W
R88,93,165	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R275	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R206,233,240,309,310, 311,312,313,314,315, 316	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R96,103,196	1-247-849-00	RES,CARBON 5.6K 5% 1/6W
R195,221,222,223,224, 225	1-247-850-00	RES,CARBON 6.2K 5% 1/6W
R117,119,143,145,152, 153,279	1-247-852-00	RES,CARBON 7.5K 5% 1/6W
R199,207	1-247-857-00	RES,CARBON 12K 5% 1/6W
R247	1-247-859-00	RES,CARBON 15K 5% 1/6W
R205,239	1-247-863-00	RES,CARBON 22K 5% 1/6W
R277,278	1-247-864-00	RES,CARBON 24K 5% 1/6W
R45,46,47,48,49,50,51, 52,242,245	1-247-865-00	RES,CARBON 27K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(EQ-02 BOARD,BVH-2000PS,2180PS/CARD RACK)		
R200,201,236	1-247-866-00	RES,CARBON 30K 5% 1/6W
R288	1-247-867-00	RES,CARBON 33K 5% 1/6W
R237	1-247-876-00	RES,CARBON 75K 5% 1/6W
R246,272,273,274,291, 292,295	1-247-879-00	RES,CARBON 100K 5% 1/6W
R290	1-247-882-00	RES,CARBON 130K 5% 1/6W
R218	1-247-888-00	RES,CARBON 240K 5% 1/6W
R229	1-247-889-00	RES,CARBON 270K 5% 1/6W
R340	1-249-414-11	RES,CARBON 560 5% 1/6W
R10,11,21,22,23,24,34, 35,173,178,181,182, 183,184,185,186,187, 216,235,238,243,244, 326,327,328,329,330, 331,333	1-249-429-11	RES,CARBON 10K 5% 1/6W
L5	1-408-399-00	INDUCTOR,MICRO,1.5 5%
L12,13,14,15,16	1-408-402-00	INDUCTOR,MICRO,2.7 5%
L3,4	1-408-421-00	INDUCTOR,MICRO,100 5%
L6,7	1-408-422-00	INDUCTOR,MICRO,120 5%
L10	1-408-658-00	INDUCTOR,VAR,2.7
LV1,2,3,4	1-408-659-00	INDUCTOR,VAR,3.3
DL1	1-415-275-00	DELAY LINE,28nS
DL2	1-415-276-00	DELAY LINE,56nS
L1,2,8	1-421-370-00	COIL,CHOKE
FB1,2,3	1-535-178-00	FERRITE BEAD
S1	1-553-441-00	SWITCH,TOGGLE
2pcs	1-563-859-11	RECEPTACLE CONNECTOR 2P
JP1,2,3	1-566-385-11	PIN,CONNECTOR 2P
TH1	1-800-202-00	THERMISTOR,S-10K
4pcs	2-282-313-00	KNOB,CONTROL
TP1,2,3,4,5,8,10,11,12, 15,16,21,22	() 3-657-703-01	TERMINAL,TP
TPE1,2,3,4,5,6	() 3-673-805-11	TERMINAL,TP

Ref.No. or Q'ty	Part No.	Description
(EQ-02 BOARD,BVH-2000PS,2180PS/CARD RACK)		
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION,PC BOARD
1pc	() 3-674-613-01	LABEL(EQ-02),PC BOARD
TP6	() 3-693-032-01	TERMINAL,TP
1pc	() 3-693-056-01	LABEL NS (EQ-02),PC BOARD
4pcs	7-621-737-08	SET SCREW,2.6x3, FLAT POINT
4pcs	7-621-981-15	SCREW,PSW2.6x6
2pcs	7-626-317-21	PIN,SPRING 2.5x8
D5	8-719-100-27	DIODE RD4.7E-B2
D1	8-719-168-07	DIODE RD6.8E-B
D2,3	8-719-815-55	DIODE 1S1555
D6	8-719-815-80	DIODE 1S1587
Q17	8-729-105-72	TRANSISTOR 2SK523-L1
Q25,26,38,39	8-729-110-53	TRANSISTOR 2SA1005
Q1,4,8,11,21,22,41	8-729-117-33	TRANSISTOR 2SC1733
IC1,17	8-759-001-16	IC MC10116L,ECL
IC21	8-759-001-98	IC MC10198L
IC3	8-759-015-95	IC MC1595L
IC22,24	8-759-900-00	IC SN74LS00N,TTL
IC15	8-759-900-04	IC SN74LS04N,TTL
IC16,18	8-759-900-08	IC SN74LS08N,TTL
IC23	8-759-900-19	IC SN74128N,TTL
IC25,26	8-759-901-23	IC SN74LS123N,TTL
IC19,20	8-759-902-21	IC SN74LS221N,TTL
IC27	8-759-906-01	IC TL601CP
IC11,12	8-759-906-07	IC TL607CP
IC13	8-759-926-10	IC TL610CP
IC6	8-759-931-02	IC CA3102E
IC4	8-759-939-93	IC AD9685BD
IC14	8-759-942-65	IC SN74265N,TTL
IC8	8-759-951-07	IC SN75107AN
IC5,10	8-759-990-82	IC TL082CP
IC7,9	8-759-990-84	IC TL084CN

Ref.No. or Q'ty	Part No.	Description
(EQ-02 BOARD,BVH-2000PS,2180PS/CARD RACK)		
Q3,6,7,10,29,30,31,32, 35	8-761-622-00	TRANSISTOR 2SC1636
Q2,5,9,12,15,16,18,19, 20,23,24,27,33,34,37, 40	8-765-300-00	TRANSISTOR 2SC2009
Q28,36	8-769-192-00	TRANSISTOR 2SK43-2

EQ-11 Board

1pc	() A-6026-051-A	MOUNTED PCB,EQ-11
C182	1-109-531-00	CAP,MICA 68PF 5% 100V
C183	1-109-538-00	CAP,MICA 130PF 5% 100V
C184	1-109-545-00	CAP,MICA 270PF 5% 100V
C173,177	1-124-236-00	CAP,ELECT 47 20% 16V
C171,172,174,175,176, 178,179,180,181,185	1-162-596-00	CAP,CERAMIC 0.022 25V
RV41	1-228-452-00	RES,ADJ,CERMET 50
R355	1-247-800-00	RES,CARBON 51 5% 1/6W
R344	1-247-811-00	RES,CARBON 150 5% 1/6W
R356	1-247-814-00	RES,CARBON 200 5% 1/6W
R349	1-247-819-00	RES,CARBON 330 5% 1/6W
R351	1-247-820-00	RES,CARBON 360 5% 1/6W
R357	1-247-826-00	RES,CARBON 620 5% 1/6W
R341,342,343,350	1-247-831-00	RES,CARBON 1K 5% 1/6W
R354	1-247-833-00	RES,CARBON 1.2K 5% 1/6W
R348	1-247-837-00	RES,CARBON 1.8K 5% 1/6W
R347	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R345	1-247-846-00	RES,CARBON 4.3K 5% 1/6W
R346	1-247-852-00	RES,CARBON 7.5K 5% 1/6W
R352,353	1-249-405-11	RES,CARBON 100 5% 1/6W
L21	1-408-401-00	INDUCTOR,MICRO 2.2
L22	1-408-410-00	INDUCTOR,MICRO 12
S2	1-570-374-11	SWITCH,SLIDE
CN2	() 1-566-086-11	PLUG,DIL 8P
CN1	() 1-566-087-11	PLUG,DIL 14P
D11	8-719-156-07	DIODE RD5.6E-B
Q51,52,53	8-729-606-33	TRANSISTOR 2SC2603
IC31	8-759-939-93	IC AD9685BD

Ref.No.
or Q'ty Part No. Description

DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

Board No; 1-606-661-11,12,13,14

1pc () A-6011-068-B COMPLETE PCB,DM-25
(COMPLETE PCB,DM-25 includes MOUNT PCB,DM-51.)

1pc () A-6026-048-A MOUNT PCB,DM-51

(COMPLETE PCB,DM-25 consists of the following parts.)

1pc () X-3673-641-0 PLATE ASSY,SHIELD

C14,69 1-102-106-00 CAP,CERAMIC
100PF 10% 50V

C76 1-107-026-00 CAP,MICA
5.1PF +/-0.5PF 500V

C144 1-107-080-00 CAP,MICA 62PF 5% 50V

C22,67,118,127,145

1-107-158-00 CAP,MICA 30PF 5% 500V

C81,82 1-107-159-00 CAP,MICA 33PF 5% 500V

C117,119 1-107-202-00 CAP,MICA 10PF 5% 500V

C92 1-107-204-00 CAP,MICA 12PF 5% 500V

C56,146 1-107-209-00 CAP,MICA 20PF 5% 500V

C24 1-108-603-00 CAP,MYLAR 0.1 5% 50V

C91 1-109-529-00 CAP,MICA 56PF 5% 100V

C509 1-109-530-00 CAP,MICA 62PF 5% 100V

C55 1-109-531-00 CAP,MICA 68PF 5% 100V

C26,104 1-109-535-00 CAP,MICA 100PF 5% 100V

C115 1-109-539-00 CAP,MICA 150PF 5% 100V

C10,11,31,53,58,100,503,

510,513 1-109-541-00 CAP,MICA 200PF 5% 100V

C504,507,511

1-109-542-00 CAP,MICA 220PF 5% 100V

C83 1-109-546-00 CAP,MICA 300PF 5% 100V

C45 1-109-548-00 CAP,MICA 360PF 5% 100V

C28 1-109-554-00 CAP,MICA 510PF 5% 100V

C60 1-109-602-00 CAP,MICA 0.001 1% 100V

C131 1-123-306-00 CAP,ELECT 47 10V

C7,63,110

1-123-307-00 CAP,ELECT 100 10V

C1,4 1-123-332-00 CAP,ELECT 47 25V

Ref.No.
or Q'ty Part No. Description

(DM-25 BOARD,CARD RACK)

(Board No.1-606-661-11,12,13,14)

C45 1-109-548-00 CAP,MICA 360PF 5% 100V

C28 1-109-554-00 CAP,MICA 510PF 5% 100V

C60 1-109-602-00 CAP,MICA 0.001 1% 100V

C131 1-123-306-00 CAP,ELECT 47 10V

C7,63,110

1-123-307-00 CAP,ELECT 100 10V

C96,97,108

1-123-330-00 CAP,ELECT 22 25V

C1,4 1-123-332-00 CAP,ELECT 47 25V

C66,75,80,90,121,132

1-123-333-00 CAP,ELECT 100 25V

C30,140 1-123-379-00 CAP,ELECT 0.47 100V

C33 1-123-381-00 CAP,ELECT 2.2 100V

C9 1-123-567-00 CAP,ELECT 2200 10V

C73,74 1-123-829-00 CAP,ELECT,NONPOLAR
2.2 50V

C3,6 1-123-839-00 CAP,ELECT 1000 16V

CV2 1-141-240-00 CAP,TRIMMER 20PF

C13,15,19,20,21,23,25,

27,29,32,35,36,44,48,

52,57,59,61,62,64,65,

68,70,71,72,77,78,84,

85,86,87,88,89,93,94,

95,101,103,105,106,107,

109,112,113,114,116,

120,122,124,128,130,

133,136,137,138,139,

148 1-161-051-00 CAP,CERAMIC 0.01 10% 50V

C149 1-161-055-00 CAP,CERAMIC 0.022 10% 50V

C2,5,8 1-161-057-00 CAP,CERAMIC
0.033 10% 50V

R189,190,198

1-214-100-00 RES,METAL 47 1% 1/4W

R64,121,185,188

1-214-112-00 RES,METAL 150 1% 1/4W

Ref.No. or Q'ty	Part No.	Description
(DM-25 BOARD,CARD RACK)		
(Board No.1-606-661-11,12,13,14)		
R66	1-214-113-00	RES,METAL 160 1% 1/4W
R68,69	1-214-122-00	RES,METAL 390 1% 1/4W
R65	1-214-129-00	RES,METAL 750 1% 1/4W
R104	1-214-132-00	RES,METAL 1K 1% 1/4W
R213	1-214-138-00	RES,METAL 1.8K 1% 1/4W
R132,133	1-214-139-00	RES,METAL 2K 1% 1/4W
R41	1-214-140-00	RES,METAL 2.2K 1% 1/4W
R214	1-214-143-00	RES,METAL 3K 1% 1/4W
R42	1-214-144-00	RES,METAL 3.3K 1% 1/4W
R218	1-214-151-00	RES,METAL 6.2K 1% 1/4W
R43	1-214-155-00	RES,METAL 9.1K 1% 1/4W
R13,23,61,134,135,141	1-214-156-00	RES,METAL 10K 1% 1/4W
R40,59	1-214-160-00	RES,METAL 15K 1% 1/4W
R210	1-214-162-00	RES,METAL 18K 1% 1/4W
R30	1-214-165-00	RES,METAL 24K 1% 1/4W
R7	1-214-175-00	RES,METAL 62K 1% 1/4W
RV7,9	1-224-934-00	RES,VAR,METAL 100
RV4	1-224-935-00	RES,VAR,METAL 200
RV5,8,16	1-224-936-00	RES,VAR,METAL 500
RV14	1-224-937-00	RES,VAR,METAL 1K
RV3,6	1-224-939-00	RES,VAR,METAL 5K
RV2	1-224-940-00	RES,VAR,METAL 10K
RV10,11,15	1-224-941-00	RES,VAR,METAL 20K
RV12	1-224-942-00	RES,VAR,METAL 50K
RV1,13	1-224-943-00	RES,VAR,METAL 100K
RV17	1-224-978-00	RES,VAR,METAL 50
RB1	1-231-407-00	RES BLOCK,2.2Kx8
LPF1	1-235-014-00	FILTER,LOW-PASS 5MHz
LPF2	1-235-104-00	FILTER,LOW-PASS 7.5MHz
R118	1-247-767-00	RES,CARBON 2.2 5% 1/6W
R212	1-247-779-00	RES,CARBON 6.8 5% 1/6W
R70	1-247-787-00	RES,CARBON 15 5% 1/6W
R195	1-247-795-00	RES,CARBON 33 5% 1/6W
R90,91	1-247-800-00	RES,CARBON 51 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(DM-25 BOARD,CARD RACK)		
(Board No.1-606-661-11,12,13,14)		
R72,74,186	1-247-804-00	RES,CARBON 75 5% 1/6W
R57,106,110,122,123, 126,130,138,140,143, 145,161,164,168,184, 196,199,200,217	1-247-807-00	RES,CARBON 100 5% 1/6W
R71,73,75,89,149	1-247-811-00	RES,CARBON 150 5% 1/6W
R109,169	1-247-814-00	RES,CARBON 200 5% 1/6W
R166,215	1-247-817-00	RES,CARBON 270 5% 1/6W
R85,86,171	1-247-818-00	RES,CARBON 300 5% 1/6W
R177	1-247-819-00	RES,CARBON 330 5% 1/6W
R67,76,82,114	1-247-821-00	RES,CARBON 390 5% 1/6W
R160	1-247-823-00	RES,CARBON 470 5% 1/6W
R120,125	1-247-824-00	RES,CARBON 510 5% 1/6W
R129	1-247-825-00	RES,CARBON 560 5% 1/6W
R150	1-247-826-00	RES,CARBON 620 5% 1/6W
R175,181	1-247-827-00	RES,CARBON 680 5% 1/6W
R79,80,84,87,107,111, 112,113,116,117	1-247-829-00	RES,CARBON 820 5% 1/6W
R201	1-247-830-00	RES,CARBON 910 5% 1/6W
R9,11,50,51,54,108, 124,142,146,147,148, 152,187,193,197	1-247-831-00	RES,CARBON 1K 5% 1/6W
R77,81,88	1-247-832-00	RES,CARBON 1.1K 5% 1/6W
R78,83,115	1-247-836-00	RES,CARBON 1.6K 5% 1/6W

Ref.No. or Qty	Part No.	Description
(DM-25 BOARD,CARD RACK)		
(Board No.1-606-661-11,12,13,14)		
R5,16,17,56,102,127,128, 131,139,176,182	1-247-838-00	RES,CARBON 2K 5% 1/6W
R49	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R24,48,101,136	1-247-842-00	RES,CARBON 3K 5% 1/6W
R154	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R15,96,159,180	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R105	1-247-849-00	RES,CARBON 5.6K 5% 1/6W
R62	1-247-850-00	RES,CARBON 6.2K 5% 1/6W
R27,173	1-247-851-00	RES,CARBON 6.8K 5% 1/6W
R162,163	1-247-852-00	RES,CARBON 7.5K 5% 1/6W
R137	1-247-854-00	RES,CARBON 9.1K 5% 1/6W
R12,18,19,20,39,44,45, 46,58,100,156,157,158, 167,170,179,183,191, 194	1-247-855-00	RES,CARBON 10K 5% 1/6W
R98,153	1-247-858-00	RES,CARBON 13K 5% 1/6W
R1,2,25	1-247-859-00	RES,CARBON 15K 5% 1/6W
R55	1-247-862-00	RES,CARBON 20K 5% 1/6W
R63	1-247-863-00	RES,CARBON 22K 5% 1/6W
R32,34,192	1-247-866-00	RES,CARBON 30K 5% 1/6W
R36	1-247-867-00	RES,CARBON 33K 5% 1/6W
R174,208	1-247-870-00	RES,CARBON 43K 5% 1/6W
R144,151	1-247-871-00	RES,CARBON 47K 5% 1/6W
R202	1-247-872-00	RES,CARBON 51K 5% 1/6W
R52	1-247-878-00	RES,CARBON 91K 5% 1/6W
R26,28,38,47,53,60,103, 178	1-247-879-00	RES,CARBON 100K 5% 1/6W
R99	1-247-882-00	RES,CARBON 130K 5% 1/6W
R210	1-247-890-00	RES,CARBON 300K 5% 1/6W
R22	1-247-892-00	RES,CARBON 360K 5% 1/6W

Ref.No. or Qty	Part No.	Description
(DM-25 BOARD,CARD RACK)		
(Board No.1-606-661-11,12,13,14)		
R21,97	1-247-903-00	RES,CARBON 1M 5% 1/6W
L7	1-408-405-00	INDUCTOR,MICRO,4.7 5%
L12	1-408-409-00	INDUCTOR,MICRO,10 5%
L5,6	1-408-416-00	INDUCTOR,MICRO,39 5%
L11	1-408-420-00	INDUCTOR,MICRO,82 5%
L10	1-408-421-00	INDUCTOR,MICRO,100 5%
L8,9	1-408-426-00	INDUCTOR,MICRO,270 5%
L1,2,3	1-409-339-00	COIL,SN
SW2A	1-516-925-21	SWITCH,DIP,8-CKT
X1	1-527-935-00	CRYSTAL,8.9MHz
FB1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17, 18,19,20	1-535-178-00	FERRITE BEAD
SW1	1-553-441-00	SWITCH,TOGGLE
TP1,2,3,4,5,6,7,8,9,10, 11,12,13,14	() 3-673-805-01	TERMINAL,TP
TPE1,2,3,4,5,6	() 3-673-805-11	TERMINAL,TP
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD
1pc	() 3-674-614-00	LABEL(DM-25),PC BOARD
6pcs	4-866-397-00	CUSHION,LED
4pcs	7-621-981-15	SCREW,PSW 2.6x6
2pcs	() 7-626-317-21	PIN,SPRING 2.5x8
D10	8-719-100-27	DIODE RD4,7E-B2
D6,9	8-719-100-40	DIODE RD6,8E-B1
D12	8-719-139-07	DIODE RD3,9E-B
D1,2,3,4,5,7,8,11,13	8-719-815-55	DIODE 1S1555
Q12,13,14	8-729-105-71	TRANSISTOR 2SK523-K2
Q3,4,9	8-729-110-53	TRANSISTOR 2SA1005
Q15	8-729-699-51	TRANSISTOR 2SA995

Ref.No. or Q'ty	Part No.	Description
(DM-25 BOARD,CARD RACK)		
(Board No.1-606-661-11,12,13,14)		
IC12,13	8-743-930-00	IC BX3930
IC1,15,16,17	8-743-931-10	IC BX3931A
IC2,6	8-759-001-16	IC MC10116L,ECL
IC4	8-759-001-98	IC MC10198L
IC7	8-759-014-96	IC MC1496P
IC3A	8-759-245-28	IC TC4528BP,CMOS
IC5	8-759-301-17	IC HD10117,ECL
IC1C,2D,3C,5B	8-759-900-00	IC SN74LS00N,TTL
IC1D	8-759-900-04	IC SN74LS04N,TTL
IC4E	8-759-900-08	IC SN74LS08N,TTL
IC1A,3B	8-759-900-10	IC SN74LS10N,TTL
IC2E	8-759-900-74	IC SN74LS74AN,TTL
IC3D,5A	8-759-901-23	IC SN74LS123N,TTL
IC2B	8-759-901-51	IC SN74LS151N,TTL
IC2C	8-759-901-63	IC SN74LS163AN,TTL
IC1B,4A,4B,4C,4D,5C,5D, 5E	8-759-902-21	IC SN74LS221N,TTL
IC9	8-759-926-10	IC TL610CP
IC10,1E	8-759-951-07	IC SN75107AN
IC14	8-759-974-06	IC SN7406N,TTL
IC3,8,11	8-759-990-82	IC TL082CP
IC2F,3F	8-759-990-84	IC TL084CN
Q11	8-761-622-00	TRANSISTOR 2SC1636
Q1,5,6,7,8,10	8-765-300-00	TRANSISTOR 2SC2009

Ref.No. or Q'ty	Part No.	Description
<u>DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)</u>		
Board No; 1-606-661-15 & up		
1pc	() A-6011-068-C	COMPLETE PCB, DM-25 (COMPLETE PCB,DM-25 includes MOUNT PCB,DM-51)
1pc	() A-6026-048-A	MOUNT PCB,DM-51 (COMPLETE PCB,DM-25 consists of the following parts.)
1pc	() X-3673-641-0	PLATE ASSY,SHIELD
C14,69	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C76	1-107-026-00	CAP,MICA 5.1PF +/-0.5PF 500V
C144	1-107-080-00	CAP,MICA 62PF 5% 50V
C145	1-107-084-00	CAP,MICA 91PF 5% 50V
C22,67,118,127,145	1-107-158-00	CAP,MICA 30PF 5% 500V
C81,82	1-107-159-00	CAP,MICA 33PF 5% 500V
C117,119	1-107-202-00	CAP,MICA 10PF 5% 500V
C92	1-107-204-00	CAP,MICA 12PF 5% 500V
C146	1-107-209-00	CAP,MICA 20PF 5% 500V
C91	1-109-529-00	CAP,MICA 56PF 5% 100V
C509	1-109-530-00	CAP,MICA 62PF 5% 100V
C55	1-109-531-00	CAP,MICA 68PF 5% 100V
C26,104	1-109-535-00	CAP,MICA 100PF 5% 100V
C10,11,31,53,58,100,115, 503,510,513	1-109-541-00	CAP,MICA 200PF 5% 100V
C504,507,511	1-109-542-00	CAP,MICA 220PF 5% 100V
C83	1-109-546-00	CAP,MICA 300PF 5% 100V
C45	1-109-548-00	CAP,MICA 360PF 5% 100V
C28	1-109-554-00	CAP,MICA 510PF 5% 100V
C60	1-109-602-00	CAP,MICA 1000PF 1% 100V
C501,502	1-109-622-00	CAP,MICA 1200PF 1% 100V
C96,97,108,152	1-123-317-00	CAP,ELECT 22 20% 16V

Ref.No. or Q'ty	Part No.	Description
(DM-25 BOARD,BVH-2000PS,2180PS/CARD RACK) (Board No.1-606-661-15 & up)		
C30,140	1-123-351-00	CAP,ELECT 0.47 20% 50V
C33,515	1-123-353-00	CAP,ELECT 2.2 20% 50V
C9	1-123-567-00	CAP,ELECT 2200 20% 10V
C3,6	1-123-839-00	CAP,ELECT 1000 20% 16V
C7,63,66,75,80,90,110, 121,132	1-124-445-00	CAP,ELECT 100 20% 16V
C1,4,131	1-124-474-00	CAP,ELECT NONPOLAR 47 20% 16V
C73,74	1-124-656-00	CAP,ELECT NONPOLAR 2.2 20% 50V
C505	1-130-471-00	CAP,MYLAR 0.001 5% 50V
C516,521	1-130-472-00	CAP,MYLAR 0.0012 5% 50V
C43	1-130-475-00	CAP,MYLAR 0.0022 5% 50V
C519,520	1-130-477-00	CAP,MYLAR 0.0033 5% 50V
C39	1-130-486-00	CAP,MYLAR 0.018 5% 50V
C54	1-130-487-00	CAP,MYLAR 0.022 5%
C24	1-130-495-00	CAP,MYLAR 0.1 5% 50V
CV2	1-141-240-00	CAP,TRIMMER 20PF
C62,68,70,85,86,87,88, 89,93,95,139,149	1-161-051-00	CAP,CERAMIC 0.01 10% 50V
C2,5,8	1-161-057-00	CAP,CERAMIC 0.033 10% 50V
C523	1-162-306-31	CAP,CERAMIC 0.01 30% 16V
C13,15,19,20,21,23,25, 27,29,32,35,36,44,48, 59,61,64,65,71,72,77, 78,84,94,101,103,105, 106,107,109,112,113, 114,116,120,122,124, 128,130,136,137,138, 148,506,508,512,514, 517,518	1-162-596-00	CAP,CERAMIC 0.022 25V
R224	1-214-526-00	RES,METAL 51 1% 1/8W
R72,74	1-214-530-00	RES,METAL 75 1% 1/8W
R71,73,75	1-214-537-00	RES,METAL 150 1% 1/8W
R212	1-215-382-00	RES,METAL 24 1% 1/6W
R189,190,198	1-215-389-00	RES,METAL 47 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(DM-25 BOARD,BVH-2000PS,2180PS/CARD RACK) (Board No.1-606-661-15 & up)		
R64,121,185,188	1-215-401-11	RES,METAL 150 1% 1/6W
R66	1-215-402-00	RES,METAL 160 1% 1/6W
R68,69	1-215-411-00	RES,METAL 390 1% 1/6W
R65	1-215-418-00	RES,METAL 750 1% 1/6W
R104	1-215-421-00	RES,METAL 1K 1% 1/6W
R213	1-215-427-00	RES,METAL 1.8K 1% 1/6W
R132,133	1-215-428-00	RES,METAL 2K 1% 1/6W
R41	1-215-429-00	RES,METAL 2.2K 1% 1/6W
R214	1-215-432-00	RES,METAL 3K 1% 1/6W
R42	1-215-433-00	RES,METAL 3.3K 1% 1/6W
R59	1-215-438-00	RES,METAL 5.1K 1% 1/6W
R218	1-215-440-00	RES,METAL 6.2K 1% 1/6W
R43	1-215-444-00	RES,METAL 9.1K 1% 1/6W
R13,23,59,61,134,135, 141	1-215-445-00	RES,METAL 10K 1% 1/6W
R509	1-215-448-00	RES,METAL 13K 1% 1/6W
R40,506	1-215-449-00	RES,METAL 15K 1% 1/6W
R210	1-215-451-00	RES,METAL 18K 1% 1/6W
R504	1-215-452-00	RES,METAL 20K 1% 1/6W
R502	1-215-454-00	RES,METAL 24K 1% 1/6W
R521	1-215-455-00	RES,METAL 27K 1% 1/6W
R507	1-215-456-00	RES,METAL 30K 1% 1/6W
R505	1-215-459-00	RES,METAL 39K 1% 1/6W
R503,508,510	1-215-460-00	RES,METAL 43K 1% 1/6W
R7,501,519	1-215-464-00	RES,METAL 62K 1% 1/6W
R511,512	1-215-469-00	RES,METAL 100K 1% 1/6W
R517	1-215-476-00	RES,METAL 200K 1% 1/6W
RV7	1-224-934-00	RES,VAR,METAL 100
RV4	1-224-935-00	RES,VAR,METAL 200
RV17	1-228-452-00	RES,VAR,CERMET 50
RV5,8,16	1-230-839-11	RES,VAR,CERMET 500
RV14	1-230-840-11	RES,VAR,CERMET 1K
RV3,6,502	1-230-842-11	RES,VAR,CERMET 5K

Ref.No. or Q'ty	Part No.	Description
(DM-25 BOARD,BVH-2000PS,2180PS/CARD RACK) (Board No.1-606-661-15 & up)		
RV501,503	1-230-843-11	RES,VAR,CERMET 10K
RV10,11,15	1-230-844-11	RES,VAR,CERMET 20K
RV12	1-230-845-11	RES,VAR,CERMET 50K
RV1,13	1-230-846-11	RES,VAR,CERMET 100K
RV9	1-230-837-11	RES,VAR,METAL 100
RB1	1-231-407-00	RES,BLOCK 2.2x8
LPF1	1-235-014-00	FILTER,LOW PASS 5MHz
LPF2	1-235-104-00	FILTER,LOW PASS 7.5MHz
R212	1-247-779-00	RES,CARBON 6.8 5% 1/6W
R70	1-247-787-00	RES,CARBON 15 5% 1/6W
R195	1-247-795-00	RES,CARBON 33 5% 1/6W
R90,91	1-247-800-00	RES,CARBON 51 5% 1/6W
R186	1-247-804-00	RES,CARBON 75 5% 1/6W
R57,106,110,122,123,126, 130,138,140,143,145, 161,164,168,184,196, 199,200,217	1-247-807-00	RES,CARBON 100 5% 1/6W
R89,149	1-247-811-00	RES,CARBON 150 5% 1/6W
R109,169	1-247-814-00	RES,CARBON 200 5% 1/6W
R166,215	1-247-817-00	RES,CARBON 270 5% 1/6W
R85,86,171	1-247-818-00	RES,CARBON 300 5% 1/6W
R177	1-247-819-00	RES,CARBON 330 5% 1/6W
R67,76,82,114	1-247-821-00	RES,CARBON 390 5% 1/6W
R160	1-247-823-00	RES,CARBON 470 5% 1/6W
R120,125	1-247-824-00	RES,CARBON 510 5% 1/6W
R129	1-247-825-00	RES,CARBON 560 5% 1/6W
R150	1-247-826-00	RES,CARBON 620 5% 1/6W
R175,181	1-247-827-00	RES,CARBON 680 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(DM-25 BOARD,BVH-2000PS,2180PS/CARD RACK) (Board No.1-606-661-15 & up)		
R79,80,84,87,107,111, 112,113,116,117	1-247-829-00	RES,CARBON 820 5% 1/6W
R201	1-247-830-00	RES,CARBON 910 5% 1/6W
R9,11,50,51,108,124,142, 146,147,148,152,187, 197	1-247-831-00	RES,CARBON 1K 5% 1/6W
R77,81,88	1-247-832-00	RES,CARBON 1.1K 5% 1/6W
R78,83,115	1-247-836-00	RES,CARBON 1.6K 5% 1/6W
R5,16,17,102,127,128, 131,139,176,182	1-247-838-00	RES,CARBON 2K 5% 1/6W
R49	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R24,48,101,136	1-247-842-00	RES,CARBON 3K 5% 1/6W
R154	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R6	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R15,96,159,180	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R105	1-247-849-00	RES,CARBON 5.6K 5% 1/6W
R27,173	1-247-851-00	RES,CARBON 6.8K 5% 1/6W
R162,163	1-247-852-00	RES,CARBON 7.5K 5% 1/6W
R137	1-247-854-00	RES,CARBON 9.1K 5% 1/6W
R98,153	1-247-858-00	RES,CARBON 13K 5% 1/6W
R1,2,25	1-247-859-00	RES,CARBON 15K 5% 1/6W
R55,63	1-247-862-00	RES,CARBON 20K 5% 1/6W

Ref.No.
or Q'ty Part No. Description

(DM-25 BOARD,BVH-2000PS,2180PS/CARD RACK)

(Board No.1-606-661-15 & up)

R32,192 1-247-866-00 RES,CARBON 30K 5% 1/6W
R174 1-247-870-00 RES,CARBON 43K 5% 1/6W
R202 1-247-872-00 RES,CARBON 51K 5% 1/6W

R26,28,38,47,60,103,178
1-247-879-00 RES,CARBON 100K 5% 1/6W

R99 1-247-882-00 RES,CARBON 130K 5% 1/6W

R211 1-247-890-00 RES,CARBON 300K 5% 1/6W
R22 1-247-892-00 RES,CARBON 360K 5% 1/6W
R21,97 1-247-903-00 RES,CARBON 1M 5% 1/6W

R12,18,19,20,39,44,45,
46,58,100,156,157,158,
167,170,179,183,191,
194,221,222,223,513,
514,516,518
1-249-429-11 RES,CARBON 10K 5% 1/6W

R144,151 1-249-437-11 RES,CARBON 47K 5% 1/6W

L7 1-408-405-00 INDUCTOR,MICRO 4.7
L12 1-408-409-00 INDUCTOR,MICRO 10
L5,6 1-408-416-00 INDUCTOR,MICRO 39
L11 1-408-420-00 INDUCTOR,MICRO 82
L10 1-408-421-00 INDUCTOR,MICRO 100

L8,9 1-408-426-00 INDUCTOR,MICRO 270
L1,2,3 1-421-370-00 COIL,CHOKE
X1 1-527-935-00 CRYSTAL 8.900MHZ

FB1,2,3,4,5,6,7,8,9,10,
11,12,13,14,15,16,17,
18,19,20

1-535-178-00 FERRITE BEAD

SW1 1-553-441-00 SWITCH,TOGGLE
SW2A 1-570-623-11 SWITCH,DIP,8-CKT

TP1,2,3,4,5,6,7,8,9,10,
11,12,13,14,16,17,18,
501,502,503,504,505

() 3-657-703-01 TERMINAL,TP

TPE1,2,3,4

() 3-673-805-11 TERMINAL,TP

1pc () 3-673-865-00 LEVER,WITH PIN
1pc () 3-673-867-00 PLATE,INDICATION,PC BOARD
1pc () 3-674-614-00 LABEL (DM-25),PC BOARD

Ref.No.
or Q'ty Part No. Description

(DM-25 BOARD,BVH-2000PS,2180PS/CARD RACK)

(Board No.1-606-661-15 & up)

4pcs 7-621-981-15 SCREW,PSW 2.6x6
2pcs 7-626-317-21 PIN,SPRING 2.5x8
D10 8-719-100-27 DIODE RD4.7E-B
D6,9 8-719-100-40 DIODE RD6.8E-B1
D12 8-719-139-07 DIODE RD3.9E-B

D1,2,3,4,5,7,8,11,13
8-719-815-55 DIODE 1S1555

Q12,13,14 8-729-105-71 TRANSISTOR 2SK523-K2
Q3,4,9 8-729-110-53 TRANSISTOR 2SA1005
Q15 8-729-699-51 TRANSISTOR 2SA995
IC12,13 8-749-930-00 IC BX3930

IC1,15,16,17
8-749-931-10 IC BX3931

IC2,6 8-759-001-16 IC MC10116L,ECL
IC4 8-759-001-98 IC MC10198L
IC7 8-759-014-96 IC MC1496P
IC1C 8-759-245-28 IC TC4528BP,CMOS
IC5 8-759-301-17 IC HD10117,ECL

IC1D,3A,3E,4A,4D,5E
8-759-900-00 IC SN74LS00N,TTL

IC3F 8-759-900-04 IC SN74LS04N,TTL
IC4G 8-759-900-08 IC SN74LS08N,TTL
IC2C 8-759-900-10 IC SN74LS10N,TTL

IC1F,4C,5F
8-759-900-74 IC SN74LS74AN,TTL

IC3C,5D 8-759-901-23 IC SN74LS123N,TTL
IC2B 8-759-901-51 IC SN74LS151N,TTL
IC3B 8-759-901-63 IC SN74LS163AN,TTL

IC1B,1E,2D,2E,2F,3D,4B,
4E,4F,5B,5C,5G
8-759-902-21 IC SN74LS221N,TTL

IC9 8-759-926-10 IC TL610CP
IC10,1G 8-759-951-07 IC SN75107AN,TTL
IC14 8-759-974-06 IC SN7406N,TTL
IC3,8,11 8-759-990-82 IC TL082CP

IC2G,3G 8-759-990-84 IC TL084CN
Q11 8-761-622-00 TRANSISTOR 2SC1636

Q1,5,6,7,8,10
8-765-300-00 TRANSISTOR 2SC2009

Ref.No. or Q'ty	Part No.	Description
<u>MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)</u>		
1pc	() A-6011-069-A	COMPLETE PCB,MD-14
	() A-6011-096-A	COMPLETE PCB,MD-14
		(For BVH-2000PS 10,12,14 model)
(This assembly includes the following parts.)		
1pc	() X-3673-641-0	PLATE ASSY,SHIELD
C82,128	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C3,12	1-107-044-00	CAP,MICA 3.3PF +/-0.5PF 500V
C501	1-107-046-00	CAP,MICA 4.7PF +/-0.5PF 500V
C42	1-107-048-00	CAP,MICA 6.8PF +/-0.5PF 500V
C18	1-107-074-00	CAP,MICA 36PF 5% 50V
C507	1-107-077-00	CAP,MICA 47PF 5% 50V
C111	1-107-082-00	CAP,MICA 75PF 5% 50V
C99,122	1-107-158-00	CAP,MICA 30PF 5% 500V
C69	1-107-164-00	CAP,MICA 51PF 5% 500V
C70	1-107-167-00	CAP,MICA 75PF 5% 500V
C93,150	1-107-169-00	CAP,MICA 100PF 5% 500V
C35,41	1-107-202-00	CAP,MICA 10PF 5% 500V
C23	1-107-207-00	CAP,MICA 16PF 5% 500V
C94	1-108-555-00	CAP,MYLAR 0.001 5% 50V
C138	1-108-563-00	CAP,MYLAR 0.0022 5% 50V
C88	1-108-567-00	CAP,MYLAR 0.0033 5% 50V
C143	1-108-571-00	CAP,MYLAR 0.0047 5% 50V
C135	1-108-573-00	CAP,MYLAR 0.0056 5% 50V
C137	1-108-575-00	CAP,MYLAR 0.0068 5% 50V
C78,79	1-108-579-00	CAP,MYLAR 0.01 5% 50V
C145	1-108-593-00	CAP,MYLAR 0.039 5% 50V
C504	1-109-525-00	CAP,MICA 39PF 5% 100V
C124,133	1-109-528-00	CAP,MICA 51PF 5% 100V
C8	1-109-531-00	CAP,MICA 68PF 5% 100V
C506	1-109-534-00	CAP,MICA 91PF 5% 100V
C102,136	1-109-535-00	CAP,MICA 100PF 5% 100V
C62	1-109-538-00	CAP,MICA 130PF 5% 100V

Ref.No. or Q'ty	Part No.	Description
<u>(MD-14 BOARD,CARD RACK)</u>		
C134,139,142		
	1-109-541-00	CAP,MICA 200PF 5% 100V
C125,127	1-109-548-00	CAP,MICA 360PF 5% 100V
C25,74	1-109-553-00	CAP,MICA 470PF 5% 100V
C100	1-109-557-00	CAP,MICA 680PF 5% 100V
C60,108,401		
	1-109-558-00	CAP,MICA 750PF 5% 100V
C505	1-109-559-00	CAP,MICA 820PF 5% 100V
C19	1-109-682-41	CAP,MICA 240PF 1% 500V
C149	1-123-307-00	CAP,ELECT 100 10V
C9,45,48	1-123-322-00	CAP,ELECT 330 16V
C73,75,76,77,91,92,104, 131,132,508,509		
	1-123-330-00	CAP,ELECT 22 25V
C51,54	1-123-332-00	CAP,ELECT 47 25V
C10,14,17,21,27,29,30, 65,66,71,97,109,114		
	1-123-333-00	CAP,ELECT 100 25V
C147	1-123-567-00	CAP,ELECT 2200 10V
C50	1-123-828-00	CAP,ELECT,NONPOLAR 1 50V
C53,56	1-123-839-00	CAP,ELECT 1000 16V
C28,32,84		
	1-123-880-11	CAP,ELECT,NONPOLAR 47 16V
CV1,2,3	1-141-240-00	CAP,TRIMMER 20PF
CV4	1-141-260-00	CAP,TRIMMER 60PF
C1,2,4,5,6,7,11,13,15, 16,20,22,24,26,31,33, 34,36,37,38,39,40,46, 47,49,58,59,63,64,67, 72,80,81,83,85,86,87, 89,90,95,96,98,101, 103,105,107,110,112, 113,115,116,117,118, 119,120,121,123,126, 129,130,140,141,144, 146		
	1-161-051-00	CAP,CERAMIC 0.01 10% 50V

Ref.No. or Qty	Part No.	Description
(MD-14 BOARD,CARD RACK)		
C502,503	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
C52,55,148	1-161-057-00	CAP,CERAMIC 0.033 10% 50V
C61,68	1-161-483-00	CAP,CERAMIC 0.1 10% 50V
R27	1-214-106-00	RES,METAL 82 1% 1/4W
R201	1-214-117-00	RES,METAL 240 1% 1/4W
R29	1-214-130-00	RES,METAL 820 1% 1/4W
R402	1-214-133-00	RES,METAL 1.1K 1% 1/4W
R49,61	1-214-137-00	RES,METAL 1.6K 1% 1/4W
R28	1-214-140-00	RES,METAL 2.2K 1% 1/4W
R145	1-214-141-00	RES,METAL 2.4K 1% 1/4W
R243	1-214-164-00	RES,METAL 22K 1% 1/4W
R401	1-214-177-00	RES,METAL 75K 1% 1/4W
R19,20	1-214-835-00	RES,METAL 62 1% 1/2W
R301,302	1-215-437-00	RES,METAL 4.7K 1% 1/4W
RV9,17	1-224-934-00	RES,VAR,METAL 100
RV20	1-224-935-00	RES,VAR,METAL 200
RV11,19	1-224-937-00	RES,VAR,METAL 1K
RV12	1-224-938-00	RES,VAR,METAL 2K
RV14,15	1-224-940-00	RES,VAR,METAL 10K
RV23	1-224-942-00	RES,VAR,METAL 50K
RV1	1-224-978-00	RES,VAR,METAL 50
RV10,18	1-230-739-11	RES,VAR,CARBON 1K
RV4	1-230-838-11	RES,VAR,METAL 200
RV7	1-230-839-11	RES,VAR,METAL 500
RV5	1-230-840-11	RES,VAR,METAL 1K
RV2,6,13,21	1-230-842-11	RES,VAR,METAL 5K
RV3,22	1-230-843-11	RES,VAR,METAL 10K
FL1	1-235-104-00	FILTER,LOW-PASS 7.5MHz
R110,120,200,211	1-247-783-00	RES,CARBON 10 5% 1/6W
R403	1-247-787-00	RES,CARBON 15 5% 1/6W
R257	1-247-790-00	RES,CARBON 20 5% 1/6W

Ref.No. or Qty	Part No.	Description
(MD-14 BOARD,CARD RACK)		
R57,99,100	1-247-791-00	RES,CARBON 22 5% 1/6W
R104,195	1-247-795-00	RES,CARBON 33 5% 1/6W
R123,216	1-247-799-00	RES,CARBON 47 5% 1/6W
R194,253	1-247-800-00	RES,CARBON 51 5% 1/6W
R1,6,35,84,112	1-247-804-00	RES,CARBON 75 5% 1/6W
R2,3,4,5,8,10,11,18,30, 31,32,38,45,54,56,58, 63,64,65,67,68,75,85, 90,103,105,106,107,108, 109,112,117,135,136, 154,175,196,197,198, 199,203,205,208,212, 230,232,250	1-247-807-00	RES,CARBON 100 5% 1/6W
R127,129,530	1-247-809-00	RES,CARBON 120 5% 1/6W
R34,207	1-247-811-00	RES,CARBON 150 5% 1/6W
R16,32,95,251,514	1-247-814-00	RES,CARBON 200 5% 1/6W
R66,121	1-247-817-00	RES,CARBON 270 5% 1/6W
R15,33,96,111,184,185, 224,225	1-247-818-00	RES,CARBON 300 5% 1/6W
R41,52,53,59,60	1-247-819-00	RES,CARBON 330 5% 1/6W
R7,17	1-247-820-00	RES,CARBON 360 5% 1/6W
R131,146,188,223	1-247-821-00	RES,CARBON 390 5% 1/6W
R122,213	1-247-822-00	RES,CARBON 430 5% 1/6W
R124,134	1-247-824-00	RES,CARBON 510 5% 1/6W
R39,46	1-247-825-00	RES,CARBON 560 5% 1/6W
R87,113,125,126,148,149, 150,151,204,217,218, 219,220,221,255	1-247-829-00	RES,CARBON 820 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(MD-14 BOARD,CARD RACK)		
R9,25,55,79,80,88,93,94, 114,137,141,166,169, 170,190,192,202,209, 215,254,501	1-247-831-00	RES,CARBON 1K 5% 1/6W
R130,147,229	1-247-832-00	RES,CARBON 1.1K 5% 1/6W
R89,128	1-247-833-00	RES,CARBON 1.2K 5% 1/6W
R50,81,155,179	1-247-835-00	RES,CARBON 1.5K 5% 1/6W
R44,51,62,91,132,222	1-247-836-00	RES,CARBON 1.6K 5% 1/6W
R97,98,115,143,180,206, 237	1-247-838-00	RES,CARBON 2K 5% 1/6W
R72,78,214	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R189,191	1-247-840-00	RES,CARBON 2.4K 5% 1/6W
R193	1-247-841-00	RES,CARBON 2.7K 5% 1/6W
R158,162,177,178	1-247-842-00	RES,CARBON 3K 5% 1/6W
R26,83,92	1-247-843-00	RES,CARBON 3.3K 5% 1/6W
R22	1-247-844-00	RES,CARBON 3.6K 5% 1/6W
R42,246	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R14	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R40,171,174,181,245	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R101,102	1-247-850-00	RES,CARBON 6.2K 5% 1/6W
R236	1-247-852-00	RES,CARBON 7.5K 5% 1/6W
R37	1-247-853-00	RES,CARBON 8.2K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(MD-14 BOARD,CARD RACK)		
R36,47,48,70,73,74,76, 77,86,142,144,156,159, 161,163,165,168,173, 176,182,186,187,226, 231,240,241,242,247, 248,249,256,502	1-247-855-00	RES,CARBON 10K 5% 1/6W
R244	1-247-858-00	RES,CARBON 13K 5% 1/6W
R13,21,23,43,69,71	1-247-859-00	RES,CARBON 15K 5% 1/6W
R227,228	1-247-862-00	RES,CARBON 20K 5% 1/6W
R133,233	1-247-863-00	RES,CARBON 22K 5% 1/6W
R153,183,252	1-247-866-00	RES,CARBON 30K 5% 1/6W
R12	1-247-872-00	RES,CARBON 51K 5% 1/6W
R167	1-247-876-00	RES,CARBON 75K 5% 1/6W
R24,82,160,164,235,238, 239	1-247-879-00	RES,CARBON 100K 5% 1/6W
R138,139,140,157,172, 505	1-247-903-00	RES,CARBON 1M 5% 1/6W
R531	1-249-415-11	RES,CARBON 680 5% 1/6W
R532	1-249-420-11	RES,CARBON 1.8K 5% 1/6W
L13,14	1-407-159-XX	INDUCTOR,MICRO,15 5%
L12	1-407-162-XX	INDUCTOR,MICRO,27 5%
L10	1-407-166-XX	INDUCTOR,MICRO,56 5%
L7	1-407-169-XX	INDUCTOR,MICRO,100 5%
L8,9	1-407-186-XX	INDUCTOR,MICRO,4.7 5%
L1,2,3,4,11	1-408-421-00	INDUCTOR,MICRO,100 5%
L5,6,15	1-421-370-00	COIL,CHOKE
X1	1-527-933-00	CRYSTAL,7.682MHz
FB1,2,3,4,5,6,7,8,9,10, 11,12,13,14	1-535-178-00	FERRITE BEAD
S1	1-553-440-00	SWITCH,TOGGLE
JP1,4,5	1-563-859-11	RECEPTACLE, CONNECTOR 2P

Ref.No. or Q'ty	Part No.	Description	Ref.No. or Q'ty	Part No.	Description
(MD-14 BOARD,CARD RACK)			(MD-14 BOARD,CARD RACK)		
JP1,2,3,4,5,6			IC27	8-759-001-16	IC MC10116L,ECL
	1-566-385-11	PIN,CONNECTOR 2P	IC13	8-759-001-98	IC MC10198L
TH1	1-800-200-00	THERMISTOR,S-3K	IC3	8-759-014-96	IC MC1496P
TP1,2,3,4,5,6,7,8,9,10			IC10	8-759-015-95	IC MC1595L
	() 3-657-703-01	TERMINAL,TP	IC9	8-759-270-69	IC TA7069P
TPE1,2,3,4,5			IC16	8-759-301-05	IC HD10105,ECL
	() 3-673-805-11	TERMINAL,TP	IC26	8-759-301-17	IC HD10117,ECL
1pc	() 3-673-865-00	LEVER,WITH PIN	IC1	8-759-301-31	IC HD10131,ECL
1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD	IC30	8-759-900-00	IC SN74LS00N,TTL
1pc	() 3-674-615-00	LABEL(MD-14),PC BOARD	IC33	8-759-900-02	IC SN74LS02N,TTL
1pc	() 3-693-055-01	LABEL NS (MD-14),PC BOARD	IC21	8-759-900-04	IC SN74LS04N,TTL
4pcs	7-621-981-15	SCREW,PSW 2.6x6	IC31	8-759-900-10	IC SN74LS10N,TTL
2pcs	() 7-626-317-21	PIN,SPRING 2.5x8	IC36	8-759-901-23	IC SN74LS123N,TTL
D31,32,33,34,35,36			IC28,29,34,35,37		
	8-719-101-97	DIODE 1SS97-1		8-759-902-21	IC SN74LS221N,TTL
D1	8-719-111-07	DIODE RD11E-B	IC14,23,32		
D4	8-719-143-07	DIODE RD4.3E-B		8-759-906-07	IC TL607CP
D11	8-719-168-07	DIODE RD6.8E-B	IC2	8-759-906-85	IC AM685DL
D2,5,6,12,14,15,17,18, 19,20,501			IC19	8-759-951-07	IC SN75107AN
	8-719-815-55	DIODE 1S1555	IC6,7	8-759-957-09	IC FT5709M
D7,8,9,10			IC4,22	8-759-990-82	IC TL082CP
	8-719-815-59	DIODE 1S1555-S	IC15,17,18,20,38		
D3,13,16	8-719-815-80	DIODE 1S1587		8-759-990-84	IC TL084CN
Q1,2,7,11,12,13,19			Q20	8-761-622-00	TRANSISTOR 2SC1636
	8-729-110-53	TRANSISTOR 2SA1005	Q8,9,10,18,23,25		
Q3,4,22,24				8-765-300-00	TRANSISTOR 2SC2009
	8-729-117-33	TRANSISTOR 2SC1733	Q15	8-769-192-00	TRANSISTOR 2SK43-2
Q5,6	8-729-177-43	TRANSISTOR 2SD774			
Q17,21	8-729-606-32	TRANSISTOR 2SC2603			
Q14,16	8-729-697-92	TRANSISTOR 2SA979			
IC5,12,25					
	8-743-931-10	IC BX3931A			

Ref.No. or Q'ty	Part No.	Description	Ref.No. or Q'ty	Part No.	Description
<u>LG-02(A) BOARD (BVH-2000PS,2180PS/CARD RACK)</u>			(LG-02(A) BOARD,CARD RACK)		
1pc	() A-6017-103-A	COMPLETE PCB,LG-02(A)	S4	1-553-441-21	SWITCH,TOGGLE
	() A-6017-122-A	COMPLETE PCB,LG-02(A)	2pcs	1-563-859-11	RECEPTACLE,CONNECTOR 2P
(For BVH-2000PS 10,12, 14 model)			JP1,2,3,4,5,6,7,8,9		
(This assembly includes the following parts.)				1-566-385-11	PIN,CONNECTOR 2P
C36	1-102-114-00	CAP,CERAMIC 470PF 10% 50V	TP1,2,3,4,5,6,7,8,9,10,		
C4	1-107-164-00	CAP,MICA 51PF 5% 500V	11,12 () 3-657-703-01		TERMINAL,TP
C6,33,34	1-108-555-00	CAP,MYLAR 0.001 5% 50V			
C38	1-108-587-00	CAP,MYLAR 0.022 5% 50V	TPE1,2,3		
			() 3-673-805-11		TERMINAL,TP
C1,2,20,27			1pc	() 3-673-865-00	LEVER,WITH PIN
	1-123-330-00	CAP,ELECT 22 25V	1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD
C5	1-123-380-00	CAP,ELECT 1 100V			
C37	1-123-616-00	CAP,ELECT 4.7 25V	1pc	() 3-674-627-11	LABEL(LG-02A),PC BOARD
C3,7,8,9,10,11,12,13,14,			1pc	() 3-693-052-01	LABEL PS-NS (LG-02A),PC BOARD
15,16,17,18,19,35			4pcs	4-866-397-00	CUSHION,LED
	1-161-055-00	CAP,CERAMIC 0.022 10% 50V	1pc	7-621-981-15	SCREW,PSW 2.6x6
R12,15	1-214-118-00	RES,METAL 270 1% 1/4W	2pcs	() 7-626-317-21	PIN,SPRING 2.5x8
R42	1-215-456-00	RES,METAL 30K 1% 1/6W	D1,2,3,4,5,6,7,8		
RB1,2,3,4,5,6,7,8,9			8-719-911-06		DIODE 1SS106
	1-231-410-00	RES BLOCK,10Kx8	D11	8-719-930-33	LED,GL3PR3,RED
R2,3,5,6,13,38			D9	8-719-930-53	LED,GL3HY3,YEL
	1-247-783-00	RES,CARBON 10 5% 1/6W	IC2G	8-759-040-46	IC MC14046BCP,CMOS
R39	1-247-819-00	RES,CARBON 330 5% 1/6W	IC3I	8-759-645-17	IC M54517P
R27,36,37			IC4F	8-759-756-27	IC,PROM,MB7051-L2A1
	1-247-829-00	RES,CARBON 820 5% 1/6W	IC4E	8-759-761-39	IC,PROM,MB7051-L1A2
R19	1-247-831-00	RES,CARBON 1K 5% 1/6W	IC2H,3L,4I,5A,5E		
R16	1-247-838-00	RES,CARBON 2K 5% 1/6W	8-759-900-00		IC SN74LS00N,TTL
R17	1-247-842-00	RES,CARBON 3K 5% 1/6W	IC2A,2B,2L,2M,3M,4L,4M,		
R9,10,11,18,20,21,22,23,			5D,5L,5M		
24,25,26,28,29,30,31,			8-759-900-04		IC SN74LS04N,TTL
32,33,34,35,40			IC1A,2K,5C		
	1-247-855-00	RES,CARBON 10K 5% 1/6W	8-759-900-08		IC SN74LS08N,TTL
L1	1-421-370-00	COIL,CHOKE	IC3H	8-759-900-11	IC SN74LS11N,TTL
S1	1-516-923-21	SWITCH,DIP,4-CKT	IC4H,5G,5I		
S2	1-516-925-21	SWITCH,DIP,8-CKT	8-759-900-32		IC SN74LS32N,TTL
S3	1-553-440-00	SWITCH,TOGGLE			

Ref.No. or Q'ty	Part No.	Description
(LG-02(A) BOARD,CARD RACK)		
IC3B,3C,3D,3E,3F,3G,5B, 5F	8-759-900-74	IC SN74LS74AN,TTL
IC5H	8-759-900-86	IC SN74LS86N,TTL
IC1C	8-759-901-23	IC SN74LS123N,TTL
IC1K,1L	8-759-901-38	IC SN74LS138N,TTL
IC2C,2D	8-759-901-61	IC SN74LS161AN,TTL
IC2J,3J,4J,5J	8-759-901-74	IC SN74LS174N,TTL
IC1E,4B,4C,4D	8-759-901-91	IC SN74LS191N,TTL
IC1F,1G,1I	8-759-902-40	IC SN74LS240N,TTL
IC1J	8-759-902-44	IC SN74LS244N,TTL
IC3K,4G,4K,5K	8-759-902-73	IC SN74LS273N,TTL
IC2E,3A	8-759-903-93	IC SN74LS393N,TTL
IC2F	8-759-906-24	IC SN74LS624N,TTL

SY-79 BOARD (BVH-2000PS,2180PS/CARD RACK)

1pc (for 02/04/12/14 model)	()	A-6017-090-A	COMPLETE PCB,SY-79
1pc (for 00/10 model)	()	A-6017-096-A	COMPLETE PCB,SY-79
(These ass'ies include the following parts.)			
1pc	()	X-3673-641-0	PLATE ASSY,SHIELD
C59	1-102-115-00	CAP,CERAMIC	560PF 10% 50V
C62,63,64,65,66,67,68, 69	1-107-026-00	CAP,MICA	5.1PF +/-0.5PF 500V
C40	1-107-085-00	CAP,MICA	100PF 5% 50V

Ref.No. or Q'ty	Part No.	Description
(SY-79 BOARD,CARD RACK)		
C57,60	1-107-209-00	CAP,MICA 20PF 5% 500V
C47,58	1-108-555-00	CAP,MYLAR 0.001 5% 50V
C31	1-123-307-00	CAP,ELECT 100 10V
C16,21,25,28,29	1-123-330-00	CAP,ELECT 22 25V
C48,49,52,56	1-123-380-00	CAP,ELECT 1 100V
C42	1-124-255-00	CAP,ELECT 1 20% 50V
C1,2,4,6,7,8,10,12,22, 34,36,38,44,46,50,55, 61	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
RB1,2,3,5,6,7,8,9,28,29	1-231-410-00	RES BLOCK,10Kx8
RB26,27	1-231-533-00	RES BLOCK,10Kx4
CP1,2,3	1-235-106-00	CR PACK
R5,16	1-247-791-00	RES,CARBON 22 5% 1/6W
R4,23	1-247-814-00	RES,CARBON 200 5% 1/6W
R8,15,22	1-247-829-00	RES,CARBON 820 5% 1/6W
R9,10	1-247-831-00	RES,CARBON 1K 5% 1/6W
R3	1-247-838-00	RES,CARBON 2K 5% 1/6W
R1,2,6,7,12,13,14,17,18, 19,20,21,24,25	1-247-855-00	RES,CARBON 10K 5% 1/6W
L1	1-409-339-00	COIL,SN
S9	1-516-925-21	SWITCH,DIP,8-CKT
X1	1-527-827-00	CRYSTAL,4.9152MHZ
S3	1-552-539-00	SWITCH,PUSH
S1,2	1-553-252-00	SWITCH,ROTARY
S6	1-553-440-00	SWITCH,TOGGLE
S4,5	1-553-441-00	SWITCH,TOGGLE
S7,8,10,11	1-553-925-00	SWITCH,ROTARY
S12 (for 00 model)	1-554-329-00	SWITCH,TOGGLE
3pcs	1-565-413-11	RECEPTACLE,CONNECTOR 2P

Ref.No. or Q'ty	Part No.	Description
(SY-79 BOARD,CARD RACK)		
JPI,2,3,4,5,6	1-566-385-11	PIN,CONNECTOR 2P
TP1,2,3,4,5,6,7,8,9,10	() 3-673-805-01	TERMINAL,TP
TPE1,2,3	() 3-673-805-11	TERMINAL,TP
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD
1pc (for 02/04 model)	() 3-674-617-00	LABEL(SY-79),PC BOARD
1pc (for 00 model)	() 3-674-684-00	LABEL(SY-79),PC BOARD
2pcs	4-866-397-00	CUSHION,LED
4pcs	7-621-981-15	SCREW,PSW2.6x6
2pcs	() 7-626-317-21	PIN,SPRING 2.5x8
ND1	8-719-901-68	LED,7-SEGMENT, GL-6R202,RED
D1,3	8-719-911-06	DIODE 1SS106
Q1	8-729-110-53	TRANSISTOR 2SA1005
IC5A,6A	8-759-044-95	IC MC14495P,CMOS
IC5M,5N	8-759-045-84	IC MC14584BCP,CMOS
IC4M	8-759-240-53	IC TC4053BP,CMOS
IC6K,6L,6M,6N	8-759-645-16	IC M54516P
IC1H	8-759-772-27	IC,EPROM,2732-72U3-5
IC1I	8-759-772-33	IC,EPROM,2732-71A3-5
IC1G	8-759-772-28	IC,EPROM,2732-73U3-5
IC1E	8-759-772-29	IC,EPROM,2732-74U3-5
IC1D	8-759-772-30	IC,EPROM,2732-75U3-5
IC1A	8-759-772-32	IC,EPROM,2732-77U3-5
IC1K	8-759-778-55	IC,EPROM,2732-70U3-6
IC1C	8-759-778-56	IC,EPROM,2732-76U3-6
IC3P,4N	8-759-900-00	IC SN74LS00N,TTL
IC2L,3Q	8-759-900-04	IC SN74LS04N,TTL
IC3M	8-759-900-08	IC SN74LS08N,TTL
IC3L	8-759-900-14	IC SN74LS14N,TTL

Ref.No. or Q'ty	Part No.	Description
(SY-79 BOARD,CARD RACK)		
IC4D	8-759-900-20	IC SN74LS20N,TTL
IC30,5F,6F	8-759-900-32	IC SN74LS32N,TTL
IC2D,2E	8-759-901-28	IC MSM5128-12RS,CMOS
IC4E,4F,6E	8-759-901-38	IC SN74LS138N,TTL
IC5E	8-759-901-39	IC SN74LS139N,TTL
IC2A,2B,2C,4B,5I	8-759-902-40	IC SN74LS240N,TTL
IC1L,10,1P,5K,5L	8-759-902-44	IC SN74LS244N,TTL
IC20,2P	8-759-902-45	IC SN74LS245N,TTL
IC4A,5J,6I,6J	8-759-902-73	IC SN74LS273N,TTL
IC3N	8-759-903-65	IC SN74LS365AN,TTL
IC2K	8-759-903-93	IC SN74LS393N,TTL
IC1M	8-759-916-80	IC LH0080A,NMOS
IC2H	8-759-916-82	IC LH0082A,NMOS
IC2I	8-759-916-84	IC LH0084A,NMOS
IC40,4P	8-759-926-30	IC AM26LS30PC
IC4Q	8-759-926-32	IC AM26LS32PC

Ref.No. or Q'ty	Part No.	Description
<u>SY-80 BOARD (BVH-2000PS,2180PS/CARD RACK)</u>		
1pc	() A-6017-091-A	COMPLETE PCB,SY-80 (This assembly includes the following parts.)
1pc	() X-3673-641-0	PLATE ASSY,SHIELD
C47	1-102-115-00	CAP,CERAMIC 560PF 10% 50V
C27	1-107-085-00	CAP,MICA 100PF 5% 50V
C48,49,51	1-107-209-00	CAP,MICA 20PF 5% 500V
C25,43	1-108-555-00	CAP,MYLAR 0.001 5% 50V
C45,46	1-108-561-00	CAP,MYLAR 0.0018 5% 50V
C1	1-123-307-00	CAP,ELECT 100 10V
C2,28,30,36,39	1-123-330-00	CAP,ELECT 22 25V
C22,29	1-123-380-00	CAP,ELECT 1 100V
C44	1-161-043-00	CAP,CERAMIC 0.0022 10% 50V
C3,5,7,11,14,16,19,23, 24,50	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
RB2	1-231-407-00	RES BLOCK,2.2Kx8
RB1,3,4,5,6,7,8,9	1-231-410-00	RES BLOCK,10Kx8
R14,18	1-247-791-00	RES,CARBON 22 5% 1/6W
R13,22,23	1-247-814-00	RES,CARBON 200 5% 1/6W
R17,20,21	1-247-829-00	RES,CARBON 820 5% 1/6W
R10,11	1-247-831-00	RES,CARBON 1K 5% 1/6W
R4,5,12	1-247-838-00	RES,CARBON 2K 5% 1/6W
R1,2,3,6,7,8,15,16,19	1-247-855-00	RES,CARBON 10K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(SY-80 BOARD,CARD RACK)		
L1	1-409-339-00	COIL,SN
S8,9	1-516-925-21	SWITCH,DIP,8-CKT
X1	1-527-827-00	CRYSTAL,4.9152MHz
S3,4	1-552-539-00	SWITCH,PUSH
S1,2	1-553-252-00	SWITCH,ROTARY
S6	1-553-440-00	SWITCH,TOGGLE
S5	1-553-441-00	SWITCH,TOGGLE
TP1,2,3,4,5,6,7,8	() 3-673-805-01	TERMINAL,TP
TPE1,2,3	() 3-673-805-11	TERMINAL,TP
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD
1pc	() 3-674-624-00	LABEL(SY-80),PC BOARD
2pcs	3-621-124-01	SPASER
4pcs	7-621-981-15	SCREW,PSW 2.6x6
2pcs	() 7-626-317-21	PIN,SPRING 2.5x8
D3,4,5,6,7	8-719-815-55	DIODE 1S1555
ND1	8-719-901-68	LED,7-SEGMENT, GL-6R202,RED
D1,2	8-719-911-06	DIODE 1SS106
Q1	8-729-110-53	TRANSISTOR 2SA1005
IC5A,5B	8-759-044-95	IC MC14495P,CMOS
IC1I	8-759-240-71	IC TC4071BP,CMOS
IC1D	8-759-772-36	IC,EPROM,2732-81U3-6
IC1C	8-759-772-37	IC,EPROM,2732-82U3-5
IC1F	8-759-776-20	IC,EPROM,2732-80U3-6
IC1G,3G,4L	8-759-900-00	IC SN74LS00N,TTL
IC2G,4H,4I,5E,5K,5L,5M	8-759-900-04	IC SN74LS04N,TTL

Ref.No. or Q'ty	Part No.	Description
(SY-80 BOARD, CARD RACK)		
IC1H, 3L	8-759-900-08	IC SN74LS08N, TTL
IC3M, 4M	8-759-900-14	IC SN74LS14N, TTL
IC3E	8-759-900-20	IC SN74LS20N, TTL
IC2F, 4J	8-759-900-32	IC SN74LS32N, TTL
IC3H, 4E	8-759-900-74	IC SN74LS74AN, TTL
IC1B, 1J	8-759-901-28	IC MSM5128-12RS, CMOS
IC2D, 2E, 3F, 4F	8-759-901-38	IC SN74LS138N, TTL
IC5F	8-759-901-39	IC SN74LS139N, TTL
IC4C	8-759-901-51	IC SN74LS151N, TTL
IC1K, 1L, 1M	8-759-901-57	IC SN74LS157N, TTL
IC1A, 2B, 3B, 4B	8-759-902-40	IC SN74LS240N, TTL
IC2H, 2J, 2N	8-759-902-44	IC SN74LS244N, TTL
IC2K, 2L, 2M	8-759-902-45	IC SN74LS245N, TTL
IC5G, 5H, 5I, 5J	8-759-902-73	IC SN74LS273N, TTL
IC4D	8-759-902-80	IC SN74LS280N, TTL
IC3J	8-759-903-65	IC SN74LS365AN, TTL
IC2I	8-759-916-80	IC LH0080A, NMOS
IC3K	8-759-916-82	IC LH0082A, NMOS

Ref.No. or Q'ty	Part No.	Description
SV-43 BOARD (BVH-2000PS, 2180PS/CARD RACK)		
1pc (for BVH-2000PS)	() A-6015-066-A	COMPLETE PCB, SV-43
1pc (for BVH-2180PS)	() A-6015-088-A	COMPLETE PCB, SV-43
(These ass'ies includes the following parts.)		
1pc	() X-3673-641-0	PLATE ASSY, SHIELD
C32, 34, 37, 39, 41	1-102-106-00	CAP, CERAMIC 100PF 10% 50V
C101	1-107-202-00	CAP, MICA 10PF 5% 500V
C15, 16, 17, 18, 19, 20, 21, 26	1-123-822-00	CAP, ELECT 47 10V
C27	1-124-141-00	CAP, ELECT 330 10V
C30, 31	1-130-491-00	CAP, MYLAR 0.047 5% 50V
C42	1-131-381-00	CAP, TANT 47 10% 10V
C40	1-161-051-00	CAP, CERAMIC 0.01 10% 50V
C1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 22, 23, 24, 25, 28, 29, 33, 35, 38	1-161-055-00	CAP, CERAMIC 0.022 10% 50V
RB1	1-231-385-00	RES BLOCK, 4.7Kx8
RB2, 3, 4, 5	1-235-109-00	RES BLOCK, 22Kx8
R2, 3, 6, 7, 10, 11, 32, 46, 47	1-247-783-00	RES, CARBON 10 5% 1/6W
R41, 44	1-247-790-00	RES, CARBON 20 5% 1/6W
R34, 35	1-247-807-00	RES, CARBON 100 5% 1/6W
R105	1-247-811-00	RES, CARBON 150 5% 1/6W
R42	1-247-814-00	RES, CARBON 200 5% 1/6W
R26	1-247-823-00	RES, CARBON 470 5% 1/6W
R39, 40	1-247-829-00	RES, CARBON 820 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(SV-43 BOARD,CARD RACK)		
R43	1-247-831-00	RES,CARBON 1K 5% 1/6W
R31	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R25,27,28,29,33	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R20,21,22,23,24,38	1-247-855-00	RES,CARBON 10K 5% 1/6W
(for BVH-2180PS)		
R101,102	1-247-855-00	RES,CARBON 10K 5% 1/6W
R13,14,15,18,19,30,36, 37	1-247-863-00	RES,CARBON 22K 5% 1/6W
(for BVH-2180)		
R103,104	1-247-863-00	RES,CARBON 22K 5% 1/6W
R16,17	1-247-879-00	RES,CARBON 100K 5% 1/6W
L1	1-408-417-00	INDUCTOR,MICRO,47 5%
L2	1-409-339-00	COIL,SN
S1	1-516-923-21	SWITCH,DIP,4-CKT
X1	1-527-936-00	CRYSTAL,10MHZ
S2	1-553-441-00	SWITCH,TOGGLE
CN1M	() 1-560-760-00	RECEP,40P,MALE
TP1,2,3,4,5,6,7,8,9,10, 11,12,13,14	() 3-673-805-01	TERMINAL,TP
TPE1,2,3,4	() 3-673-805-11	TERMINAL,TP
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD
1pc	() 3-674-619-00	LABEL(SV-43),PC BOARD
2pcs	4-866-397-01	CUSHION,LED
4pcs	7-621-981-15	SCREW,PSW 2.6x6
2pcs	() 7-626-317-21	PIN,SPRING 2.5x8
D1,3,4,5	8-719-815-55	DIODE 1S1555
ND1	8-719-901-68	LED,7-SEGMENT, GL-6R202,RED
D2	8-719-911-06	DIODE 1SS106
Q4	8-729-110-53	TRANSISTOR 2SA1005
Q1,2	8-729-117-54	TRANSISTOR 2SA1175

Ref.No. or Q'ty	Part No.	Description
(SV-43 BOARD,CARD RACK)		
Q3	8-729-606-32	TRANSISTOR 2SC2603
IC5C	8-759-044-95	IC MC14495P,CMOS
IC2N	8-759-045-38	IC MC14538BCP,CMOS
IC1R	8-759-240-49	IC TC4049BP,CMOS
IC1P,1Q,5I,6O	8-759-241-74	IC TC40174BP,CMOS
IC1N	8-759-245-20	IC TC4520BP,CMOS
IC2P,2Q,4I,6N	8-759-345-03	IC HD14503BP,CMOS
(for BVH-2180PS)		
IC6D	8-759-345-03	IC HD14503BP,CMOS
(for BVH-2000PS)		
IC1F	8-759-758-95	IC,EPROM,MBM2732-S2U3
IC1I	8-759-758-97	IC,EPROM,MBM2732-S4U3
IC6K	8-759-761-26	IC,EPROM,MBM2732-S8U3-2
IC1E	8-759-769-76	IC,EPROM,MBM2732-S1U3-9
IC1H	8-759-764-06	IC,EPROM,MBM2732-S3U3-6
IC6I	8-759-765-47	IC,EPROM,MBM2732-S7U3-8
(for BVH-2180PS)		
IC1F	8-759-764-32	IC,EPROM,MBM2732-S2Q1
IC1I	8-759-764-34	IC,EPROM,MBM2732-S4Q1
IC6I	8-759-765-48	IC,EPROM,MBM2732-S7Q1-2
IC6K	8-759-764-36	IC,EPROM,MBM2732-S8Q1
IC1E	8-759-769-77	IC,EPROM,MBM2732-S1Q1-3
IC1H	8-759-764-33	IC,EPROM,MBM2732-S3Q1
IC5H,5O	8-759-900-00	IC SN74LS00N,TTL
IC4G,5P	8-759-900-02	IC SN74LS02N,TTL
IC4D	8-759-900-03	IC SN74LS03N,TTL
IC2R,3O,4F,6C	8-759-900-04	IC SN74LS04N,TTL
IC4H,4N	8-759-900-08	IC SN74LS08N,TTL
IC3H,5F	8-759-900-10	IC SN74LS10N,TTL
IC4E	8-759-900-30	IC SN74LS30N,TTL
IC3G,3I,4O,5E,5N	8-759-900-32	IC SN74LS32N,TTL
IC4M,5D,5G	8-759-900-74	IC SN74LS74AN,TTL
IC6F	8-759-901-07	IC SN74LS107AN,TTL
IC1M,6M	8-759-901-28	IC MSM5128-12RS,CMOS
IC1O,3E	8-759-901-38	IC SN74LS138N,TTL

Ref.No. or Q'ty	Part No.	Description
(SV-43 BOARD,CARD RACK)		
IC20,3D,3F,3N,5M	8-759-901-39	IC SN74LS139N,TTL
IC3J,3K,3R,4C,4J,4R,5Q	8-759-902-44	IC SN74LS244N,TTL
IC1D,4K,6P	8-759-902-45	IC SN74LS245N,TTL
IC3P,3Q,4P,4Q	8-759-906-70	IC SN74LS670N,TTL
IC6H	8-759-910-04	IC SN74S04N,TTL
IC2B,3L	8-759-916-80	IC LH0080A,NMOS

Ref.No. or Q'ty	Part No.	Description
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RL-12 BOARD (BVH-2000PS,2180PS/CARD RACK)

1pc (for BVH-2000PS)	() A-6015-067-C	COMPLETE PCB,RL-12
1pc (for BVH-2180PS)	() A-6015-089-A	COMPLETE PCB,RL-12
(These ass'ies includes the following parts.)		
1pc	() X-3673-641-0	PLATE ASSY,SHIELD
C113,114	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C120,121	1-102-112-00	CAP,CERAMIC 330PF 10% 50V
C31,32,33,34,35,42	1-102-114-00	CAP,CERAMIC 470PF 10% 50V
C116	1-107-202-00	CAP,MICA 10PF 5% 500V
C111	1-108-566-00	CAP,MYLAR 0.003 5% 50V
C21	1-123-611-00	CAP,ELECT 1 50V
C2,3,16,19,26,28,48,86,88	1-123-821-00	CAP,ELECT 47 16V
C102	1-124-141-00	CAP,ELECT 330 10V
C11,47,51,53,60,61,62,80,81,90,93,94,96,101	1-124-236-00	CAP,ELECT 47 16V
C46,68	1-124-240-00	CAP,ELECT 10 25V
C38,39	1-124-656-00	CAP,ELECT NONPOLAR 2.2 50V
C115	1-130-483-00	CAP,MYLAR 0.01 5% 50V
C112	1-130-484-00	CAP,MYLAR 0.012 5% 50V
C106,110	1-130-485-00	CAP,MYLAR 0.015 5% 50V
(for BVH-2000PS)		
C108	1-130-485-00	CAP,MYLAR 0.015 5% 50V
(for BVH-2180PS)		
C108	1-130-486-00	CAP,MYLAR 0.018 5% 50V
C105	1-130-489-00	CAP,MYLAR 0.033 5% 50V
(for BVH-2000PS)		
C107	1-130-489-00	CAP,MYLAR 0.033 5% 50V
(for BVH-2180PS)		
C107	1-130-490-00	CAP,MYLAR 0.039 5% 50V
C40	1-130-495-00	CAP,MYLAR 0.1 5% 50V
(for BVH-2000PS)		
C41	1-130-495-00	CAP,MYLAR 0.1 5% 50V
C56,57,58,59,67,69	1-131-369-00	CAP,TANT 4.7 10% 16V

Ref.No. or Q'ty	Part No.	Description	Ref.No. or Q'ty	Part No.	Description
(RL-12 BOARD,CARD RACK)			(RL-12 BOARD,CARD RACK)		
C17,20,22,23,25,30,44	1-161-047-00	CAP,CERAMIC 0.0047 10% 50V	R77,87,153	1-215-447-00	RES,METAL 12K 1% 1/6W
C5,6,7,8,9,10	1-161-049-00	CAP,CERAMIC 0.0068 10% 50V	(for BVH-2000PS)		
C14	1-161-051-00	CAP,CERAMIC 0.01 10% 50V	R187	1-215-448-00	RES,METAL 13K 1% 1/6W
(for BVH-2180PS)			R80,94,98,100,103,104, 115,116,117	1-215-449-00	RES,METAL 15K 1% 1/6W
C41	1-161-897-00	CAP,CERAMIC 0.33 50V	R89	1-215-451-00	RES,METAL 18K 1% 1/6W
C1,4,15,18,27,29,36,37, 45,49,50,52,54,55,70, 82,83,84,85,87,89,91, 92,95,97,100,103,104, 131,132	1-162-596-00	CAP,CERAMIC 0.022 25V	R40,42,44,45,82,90,93, 95,96,144,146,186,188, 189	1-215-452-00	RES,METAL 20K 1% 1/6W
(for BVH-2000PS)			R149,151	1-215-454-00	RES,METAL 24K 1% 1/6W
R212	1-215-373-31	RES,METAL 10 1% 1/6W	R177	1-215-468-00	RES,,METAL 91K 1% 1/6W
R78	1-215-406-00	RES,METAL 240 1% 1/6W	R58,123,124,135,141, 178,179,180,181,182, 1-215-469-00		RES,METAL 100K 1% 1/6W
R32,175	1-215-418-00	RES,METAL 750 1% 1/6W	(for BVH-2000PS)		
R30,31,64,106	1-215-425-00	RES,METAL 1.5K 1% 1/6W	R183	1-215-469-00	RES,METAL 100K 1% 1/6W
R108	1-215-428-00	RES,METAL 2K 1% 1/6W	RV10	1-224-936-00	RES,VAR,CERMET 500
R36,37,110	1-215-432-00	RES,METAL 3K 1% 1/6W	RV7	1-224-937-00	RES,VAR,CERMET 1K
R184	1-215-433-00	RES,METAL 3.3K 1% 1/6W	RV11	1-224-938-00	RES,VAR,CERMET 2K
(for BVH-2180PS)			RV1,2,3,4,5,6	1-224-939-00	RES,VAR,CERMET 5K
R212	1-215-435-00	RES,METAL 3.9K 1% 1/6W	RV9	1-224-940-00	RES,VAR,CERMET 10K
R185	1-215-440-00	RES,METAL 6.2K 1% 1/6W	RV12,13,15	1-224-941-00	RES,VAR,CERMET 20K
(for BVH-2180PS)					
R213	1-215-440-00	RES,METAL 6.2K 1% 1/6W	RV8,20	1-224-942-00	RES,VAR,CERMET 50K
R111,113	1-215-442-00	RES,METAL 7.5K 1% 1/6W	RV14	1-230-741-21	RES,VAR,CARBON 10K
(for BVH-2180PS)			RB2	1-231-399-00	RES,BLOCK 330x8
R187	1-215-443-00	RES,METAL 8.2K 1% 1/6W	R83,107,109	1-247-783-00	RES,CARBON 10 5% 1/6W
R41,43,62,81,85,91,92, 97,99,102,143,145,148, 150,193	1-215-445-00	RES,METAL 10K 1% 1/6W	(for BVH-2000PS)		
R176	1-215-446-00	RES,METAL 11K 1% 1/6W	R216	1-247-783-00	RES,CARBON 10 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(RL-12 BOARD,CARD RACK)		
R79,210,211	1-247-815-00	RES,CARBON 220 5% 1/6W
R15,17,21,25,28,34,173	1-247-831-00	RES,CARBON 1K 5% 1/6W
R35	1-247-835-00	RES,CARBON 1.5K 5% 1/6W
R1,2,3,4,5,6,76	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R7,9,11,13,22,23,88	1-247-842-00	RES,CARBON 3K 5% 1/6W
R49,56	1-247-843-00	RES,CARBON 3.3K 5% 1/6W
R67,84	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R169	1-247-846-00	RES,CARBON 4.3K 5% 1/6W
R8,10,12,14,26,27,197	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R196	1-247-860-00	RES,CARBON 16K 5% 1/6W
(for BVH-2180PS)		
R66	1-247-861-00	RES,CARBON 18K 5% 1/6W
R54,55,195	1-247-862-00	RES,CARBON 20K 5% 1/6W
R154,161,172	1-247-863-00	RES,CARBON 22K 5% 1/6W
(for BVH-2180PS)		
R73	1-247-873-00	RES,CARBON 56K 5% 1/6W
R194,200	1-247-877-00	RES,CARBON 82K 5% 1/6W
R46,50,51,168	1-247-879-00	RES,CARBON 100K 5% 1/6W
R57	1-247-883-00	RES,CARBON 150K 5% 1/6W
R16,18,19,20,24,29	1-247-885-00	RES,CARBON 180K 5% 1/6W
R52,53	1-247-887-00	RES,CARBON 220K 5% 1/6W
(for BVH-2180PS)		
R183	1-247-888-00	RES,CARBON 240K 5% 1/6W
R174	1-247-891-00	RES,CARBON 330K 5% 1/6W
R48,167	1-247-893-00	RES,CARBON 390K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(RL-12 BOARD,CARD RACK)		
R72	1-247-895-00	RES,CARBON 470K 5% 1/6W
R47,112,147,152	1-247-903-00	RES,CARBON 1M 5% 1/6W
R38,39,74,75,86,114,155, 156,157,158,159,160, 164,165,170,190,191, 192,215,217	1-249-429-11	RES,CARBON 10K 5% 1/6W
(for BVH-2000PS)		
R66,73	1-249-429-11	RES,CARBON 10K 5% 1/6W
L1,2,3	1-408-417-00	INDUCTOR,MICRO 47 5%
L4,5,6	1-421-370-00	COIL,CHOKE
S1	1-553-441-00	SWITCH,TOGGLE
TP1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17, 18,19,20,21	() 3-673-805-01	TERMINAL,TP
TPE1,2,3,4	() 3-673-805-11	TERMINAL,TP
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION,PC BOARD
(for BVH-2000PS)		
1pc	() 3-674-620-01	LABEL(RL-12),PC BOARD
(for BVH-2180PS)		
1pc	() 3-690-531-01	LABEL(RL-12),PC BOARD
1pc	7-621-737-08	SCREW,2.6x3
4pcs	7-621-981-15	SCREW,PSW 2.6x6
2pcs	7-626-317-21	PIN,SPRING 2.5x8
D40	8-719-156-07	DIODE RD5.6E-B
D301,302	8-719-175-07	DIODE RD7.5E
D4,5,6,7	8-719-400-25	LED,LN25RP,RED
D0,1,2,3	8-719-400-35	LED,LN35BP,GREEN
D8,9,10,11,12,13,14,15, 16,17,18,19,20,21,22, 23,24,25,26,27,28,29, 43,44,45,46,47,48	8-719-815-55	DIODE 1S1555
Q1	8-729-374-02	TRANSISTOR 2SB740
IC4	8-759-100-34	IC UPC648D
IC1,2,3	8-759-103-93	IC UPC393C

Ref. No. or Q'ty	Part No.	Description
(RL-12 BOARD, CARD RACK)		
IC18, 25, 26	8-759-135-80	IC UPC358C
IC14, 27	8-759-145-58	IC UPC4558C
IC2I, 2J, 2L	8-759-182-53	IC UPD8253C-5, NMOS
IC6, 21, 22	8-759-208-06	IC TC4051BPHB
IC23	8-759-208-08	IC TC4052BPHB
IC29	8-759-208-10	IC TC4053BPHB
IC2C, 2D, 2F, 2Q, 2R	8-759-241-74	IC TC40174BP, CMOS
IC2E, 2M, 2N, 2O, 2P	8-759-345-03	IC HD14503BP, CMOS
IC1H	8-759-766-61	IC, PROM, MB7052-R2U3
IC1E, 1P, 3F	8-759-900-00	IC SN74LS00N, TTL
IC1N, 1O, 1T, 2G, 2T	8-759-900-04	IC SN74LS04N, TTL
IC1K	8-759-900-08	IC SN74LS08N, TTL
IC3O	8-759-900-32	IC SN74LS32N, TTL
IC1J, 1M	8-759-900-74	IC SN74LS74AN, TTL
IC1D, 2S	8-759-900-86	IC SN74LS86N, TTL
IC1Q, 3P	8-759-901-07	IC SN74LS107AN, TTL
IC3M	8-759-901-38	IC SN74LS138N, TTL
IC3N	8-759-901-39	IC SN74LS139N, TTL
IC1I, 1S	8-759-901-74	IC SN74LS174N, TTL
IC1F, 1G	8-759-901-91	IC SN74LS191N, TTL
IC3G	8-759-901-97	IC SN74LS197N, TTL
IC2A	8-759-903-74	IC SN74LS374N, TTL
IC1L, 1R	8-759-903-93	IC SN74LS393N, TTL
IC17	8-759-905-13	IC BA9101
IC11, 12	8-759-906-01	IC TL601CP
IC1B, 1C	8-759-910-43	IC CX23028
IC13	8-759-910-83	IC TL072ACP
IC31	8-759-990-04	IC TL074CN
IC5, 7, 8, 9, 15, 16, 19, 28	8-759-990-82	IC TL082CP

Ref. No. or Q'ty	Part No.	Description

RS-20 BOARD (BVH-2000PS, 2180PS/CARD RACK)		

BVH-2000PS #33401-34399		
BVH-2180PS #10001-10599		
(Board No. 1-615-381-11)		
IC4F	8-759-901-91	IC SN74LS191N
IC4J	8-759-901-91	IC SN74LS191N
IC4I	8-759-763-27	IC MB7052-R2U2
CN4G	1-566-088-11	PLUG, DIL 16P
CN4H	1-566-088-11	PLUG, DIL 16P

CD-17 BOARD (BVH-2000PS, 2180PS/CARD RACK)		

Board No; 1-606-075-11, 12, 13		
1pc	() A-6015-072-B	COMPLETE PCB, CD-17
	() A-6015-096-A	COMPLETE PCB, CD-17
		(For BVH-2000PS 10, 12, 14 model)
(This assembly includes the following parts.)		
1pc	() X-3673-641-0	PLATE ASSY, SHIELD
C211	1-102-106-00	CAP, CERAMIC 100PF 10% 50V
C210	1-102-113-00	CAP, CERAMIC 390PF 10% 50V
C205, 206	1-102-125-00	CAP, CERAMIC 0.0047 10% 50V
C80	1-107-074-00	CAP, MICA 36PF 5% 50V
C20, 22, 68, 114	1-107-085-00	CAP, MICA 100PF 5% 50V
C8, 9, 10, 11, 59, 75, 78, 136, 138, 162	1-108-555-00	CAP, MYLAR 0.001 5% 50V
C74, 77, 115	1-108-563-00	CAP, MYLAR 0.0022 5% 50V

Ref. No. or Q'ty	Part No.	Description
(CD-17 BOARD, CARD RACK)		
(Board No. 1-606-075-11, 12, 13)		
C203	1-108-564-00	CAP, MYLAR 0.0024 5% 50V
C40, 42	1-108-565-00	CAP, MYLAR 0.0027 5% 50V
C39, 41	1-108-573-00	CAP, MYLAR 0.0056 5% 50V
C53, 118, 119, 137, 161, 201, 204	1-108-579-00	CAP, MYLAR 0.01 5% 50V
C131	1-108-581-00	CAP, MYLAR 0.012 5% 50V
C60	1-108-583-00	CAP, MYLAR 0.015 5% 50V
C52, 166	1-108-587-00	CAP, MYLAR 0.022 5% 50V
C5, 35, 36, 37, 38, 152, 153	1-108-595-00	CAP, MYLAR 0.047 5% 50V
C73, 76	1-108-603-00	CAP, MYLAR 0.1 5% 50V
C67	1-109-555-00	CAP, MICA 560PF 5% 100V
C19, 81	1-109-561-00	CAP, MICA 0.001 5% 100V
C123, 124, 127	1-123-818-00	CAP, ELECT 22 25V
C4, 13, 23, 26, 30, 31, 43, 44, 61, 62, 63, 72, 79	1-123-821-00	CAP, ELECT 47 16V
C32, 132, 141, 144, 147, 149, 150, 157	1-123-822-00	CAP, ELECT 47 10V
C159	1-124-141-00	CAP, ELECT 330 10V
C21	1-130-079-00	CAP, POLY 8600PF 1% 50V
C6, 7	1-131-345-00	CAP, TANT 0.47 10% 35V
C70	1-131-349-00	CAP, TANT 2.2 35V
C121, 165	1-131-371-00	CAP, TANT 10 10% 16V
C126	1-131-373-00	CAP, TANT 22 10% 16V
C120	1-131-374-00	CAP, TANT 33 10% 16V
CV1	1-141-260-00	CAP, TRIMMER 50PF
C122	1-161-039-00	CAP, CERAMIC 0.001 10% 50V
C3, 18, 24, 25, 27, 28, 33, 50, 51, 64, 65, 66, 69, 112, 113, 116, 117, 128, 130, 133, 135, 139, 140, 142, 143, 145, 146, 148, 151, 154, 155, 156, 158, 160	1-161-055-00	CAP, CERAMIC 0.022 10% 50V

Ref. No. or Q'ty	Part No.	Description
(CD-17 BOARD, CARD RACK)		
(Board No. 1-606-075-11, 12, 13)		
R78	1-214-134-00	RES, METAL 1.2K 1% 1/4W
R82	1-214-138-00	RES, METAL 1.8K 1% 1/4W
R87	1-214-145-00	RES, METAL 3.6K 1% 1/4W
R29	1-214-146-00	RES, METAL 3.9K 1% 1/4W
R89	1-214-149-00	RES, METAL 5.1K 1% 1/4W
R13	1-214-151-00	RES, METAL 6.2K 1% 1/4W
R47, 49, 107, 108	1-214-155-00	RES, METAL 9.1K 1% 1/4W
R28, 46, 48, 88, 105, 106, 117, 118	1-214-156-00	RES, METAL 10K 1% 1/4W
R7, 27, 38, 42, 122, 123	1-214-160-00	RES, METAL 15K 1% 1/4W
R10, 11	1-214-163-00	RES, METAL 20K 1% 1/4W
R43, 50	1-214-167-00	RES, METAL 30K 1% 1/4W
R33, 90	1-214-178-00	RES, METAL 82K 1% 1/4W
R198	1-214-180-00	RES, METAL 100K 1% 1/4W
RV14, 15, 16, 17	1-224-938-00	RES, VAR, METAL 2K
RV2, 3, 6, 7, 8, 9, 10, 11, 12	1-224-940-00	RES, VAR, METAL 10K
RV13	1-224-941-00	RES, VAR, METAL 20K
RV5	1-224-942-00	RES, VAR, METAL 50K
RV4	1-226-698-00	RES, VAR, CERMET 10K
RV1	1-228-763-00	RES, VAR, CERMET 5K
RB1	1-235-109-00	RES BLOCK, 22Kx8
R32, 159, 194, 206, 209	1-247-783-00	RES, CARBON 10 5% 1/6W
R68, 86, 91, 174	1-247-799-00	RES, CARBON 47 5% 1/6W
R128	1-247-804-00	RES, CARBON 75 5% 1/6W
R61, 310	1-247-807-00	RES, CARBON 100 5% 1/6W
R216	1-247-823-00	RES, CARBON 470 5% 1/6W
R171	1-247-824-00	RES, CARBON 510 5% 1/6W
R36, 37, 39, 41, 95, 99, 101, 103, 149, 157, 160, 301, 302, 303	1-247-831-00	RES, CARBON 1K 5% 1/6W

Ref. No. or Q'ty	Part No.	Description	Ref. No. or Q'ty	Part No.	Description
(CD-17 BOARD, CARD RACK) (Board No. 1-606-075-11, 12, 13)			(CD-17 BOARD, CARD RACK) (Board No. 1-606-075-11, 12, 13)		
R51, 54, 100, 102	1-247-835-00	RES, CARBON 1.5K 5% 1/6W	R136	1-247-869-00	RES, CARBON 39K 5% 1/6W
R67	1-247-837-00	RES, CARBON 1.8K 5% 1/6W	R15, 161	1-247-870-00	RES, CARBON 43K 5% 1/6W
R66, 119, 131, 133, 186, 196, 197	1-247-839-00	RES, CARBON 2.2K 5% 1/6W	R158	1-247-873-00	RES, CARBON 56K 5% 1/6W
R8	1-247-842-00	RES, CARBON 3K 5% 1/6W	R129	1-247-876-00	RES, CARBON 75K 5% 1/6W
R22, 24, 80	1-247-843-00	RES, CARBON 3.3K 5% 1/6W	R140	1-247-878-00	RES, CARBON 91K 5% 1/6W
R6, 75, 79, 132, 187, 211	1-247-847-00	RES, CARBON 4.7K 5% 1/6W	R14, 35, 40, 98, 104, 151, 173	1-247-879-00	RES, CARBON 100K 5% 1/6W
R142, 143	1-247-848-00	RES, CARBON 5.1K 5% 1/6W	R163, 214	1-247-886-00	RES, CARBON 200K 5% 1/6W
R124, 156	1-247-850-00	RES, CARBON 6.2K 5% 1/6W	R188, 189, 190, 191	1-247-895-00	RES, CARBON 470K 5% 1/6W
R141	1-247-851-00	RES, CARBON 6.8K 5% 1/6W	R77	1-247-901-00	RES, CARBON 820K 5% 1/6W
R1, 2, 3, 5, 16, 17, 18, 19, 25, 30, 31, 34, 44, 45, 52, 53, 55, 56, 57, 58, 59, 60, 63, 71, 83, 84, 85, 92, 93, 94, 96, 97, 109, 110, 111, 112, 113, 114, 115, 116, 120, 130, 138, 139, 147, 148, 152, 154, 157, 162, 164, 165, 166, 167, 169, 175, 215, 304, 305	1-247-855-00	RES, CARBON 10K 5% 1/6W	R202, 203, 204, 207, 212, 213	1-247-903-00	RES, CARBON 1M 5% 1/6W
R121	1-247-857-00	RES, CARBON 12K 5% 1/6W	L3	1-408-421-00	INDUCTOR, MICRO, 100 5%
R134, 135	1-247-858-00	RES, CARBON 13K 5% 1/6W	L1, 2, 4	1-409-339-00	COIL, SN
R192, 193	1-247-861-00	RES, CARBON 18K 5% 1/6W	S3	1-516-925-21	SWITCH, DIP, 8-CKT
R65, 178	1-247-862-00	RES, CARBON 20K 5% 1/6W	S7	1-552-539-00	SWITCH, PUSH
R20, 21, 69, 70, 81, 170, 176, 180, 181, 182, 185, 200, 201	1-247-863-00	RES, CARBON 22K 5% 1/6W	S1, 2	1-553-440-00	SWITCH, TOGGLE
R125	1-247-864-00	RES, CARBON 24K 5% 1/6W	S1 (NS)	1-554-441-00	SWITCH, TOGGLE
R172	1-247-865-00	RES, CARBON 27K 5% 1/6W	S4, 5, 6	1-554-027-00	SWITCH, ROTARY
R4, 9, 64, 168, 179	1-247-866-00	RES, CARBON 30K 5% 1/6W	S8	1-554-080-00	SWITCH, ROTARY
			TP1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 30, 31	() 3-673-805-01	TERMINAL, TP
			TPE1, 2, 3, 4, 5, 6	() 3-673-805-11	TERMINAL, TP
			1pc	() 3-673-865-00	LEVER, WITH PIN
			1pc	() 3-673-867-00	PLATE, INDICATION, PC BOARD
			1pc	() 3-674-628-00	LABEL (CD-17), PC BOARD
			1pc	() 3-693-053-01	LABEL PS-NS (CD-17), PC BOARD
			6pcs	4-866-397-00	CUSHION, LED
			4pcs	7-621-981-15	SCREW, PSW 2.6x6
			2pcs	() 7-626-317-21	PIN, SPRING 2.5x8

Ref. No. or Q'ty	Part No.	Description
(CD-17 BOARD, CARD RACK) (Board No. 1-606-075-11, 12, 13)		
D1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47	8-719-815-55	DIODE 1S1555
Q10, 18, 20	8-729-117-54	TRANSISTOR 2SA1175
Q9, 19	8-729-364-12	TRANSISTOR 2SC641K
Q7, 8, 15	8-729-672-43	TRANSISTOR 2SC2724
IC31, 32	8-751-300-00	IC CX130
IC27, 4L	8-759-045-38	IC MC14538BCP, CMOS
IC26, 29	8-759-131-11	IC UPC311C
IC1, 2, 4, 25, 28, 35, 37	8-759-145-58	IC UPC4558C
IC3F, 5F, 5G, 5I, 5K	8-759-182-53	IC UPD8253C-5, NMOS
IC1C, 4K	8-759-240-11	IC TC4011BP, CMOS
IC1D, 2D, 4M	8-759-240-13	IC TC4013BP, CMOS
IC24	8-759-240-51	IC TC4051BP, CMOS
IC4E	8-759-240-71	IC TC4071BP, CMOS
IC40	8-759-240-81	IC TC4081BP, CMOS
IC3E, 4H, 5Q	8-759-241-74	IC TC40174BP, CMOS
IC4D, 5M	8-759-245-20	IC TC4520BP, CMOS
IC4I, 4J, 5A, 5B, 5C, 5D, 5E	8-759-345-03	IC HD14503BP, CMOS
IC8	8-759-708-05	IC NJM78L05A
IC11, 12, 13, 22, 23, 33, 34	8-759-745-60	IC NJM4560D

Ref. No. or Q'ty	Part No.	Description
(CD-17 BOARD, CARD RACK) (Board No. 1-606-075-11, 12, 13)		
IC18	8-759-900-00	IC SN74LS00N, TTL
IC3C, 4Q, 4S, 5R	8-759-900-04	IC SN74LS04N, TTL
IC3D	8-759-900-14	IC SN74LS14N, TTL
IC4P	8-759-900-32	IC SN74LS32N, TTL
IC2C, 3B	8-759-900-74	IC SN74LS74AN, TTL
IC19, 4N	8-759-900-86	IC SN74LS86N, TTL
IC5N, 5O, 5P	8-759-901-07	IC SN74LS107AN, TTL
IC4B, 4C, 5L	8-759-901-38	IC SN74LS138N, TTL
IC7, 17, 2B, 4G	8-759-902-21	IC SN74LS221N, TTL
IC4R	8-759-903-93	IC SN74LS393N, TTL
IC9, 21	8-759-952-07	IC SN75207BN
IC3, 5, 6, 14, 15, 16	8-759-990-82	IC TL082CP
Q1, 11, 12, 13	8-761-622-00	TRANSISTOR 2SC1636
Q3, 4, 5, 6, 16, 17, 21, 22, 23	8-769-192-00	TRANSISTOR 2SK43-2

Ref.No. or Q'ty	Part No.	Description
<u>CD-17 BOARD (BVH-2000PS,2180PS/CARD RACK)</u>		
Board No; 1-606-075-14 & up		
1pc	() A-6015-072-C	COMPLETE PCB,CD-17
	() A-6015-096-A	COMPLETE PCB,CD-17
		(For BVH-2000PS 10,12,14 model)
(This assembly includes the following parts.)		
1pc	() X-3673-641-0	PLATE ASSY,SHIELD
C11	1-102-074-00	CAP,CERAMIC 0.001 10% 50V
C68	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C115	1-102-113-00	CAP,CERAMIC 390PF 10% 50V
C112,113	1-102-125-00	CAP,CERAMIC 0.0047 10% 50V
C45	1-107-074-00	CAP,MICA 36PF 5% 50V
C150	1-107-077-00	CAP,MICA 47PF 5% 50V
C14,15,46,49	1-107-085-00	CAP,MICA 100PF 5% 50V
C42	1-109-555-00	CAP,MICA 560PF 5% 100V
C44	1-109-561-00	CAP,MICA 0.001 5% 100V
C148	1-124-141-00	CAP,ELECT 330 10V
C78,90	1-124-234-00	CAP,ELECT 22 25V
C1,2,10,18,21,24,25,33, 34,36,41,47,56,57,95, 103,123,134,136	1-124-236-00	CAP,ELECT 47 16V
C13	1-130-079-00	CAP,POLY 8600PF 1% 50V
C8,9,61,64,85,117,118	1-130-471-00	CAP,MYLAR 0.001 5% 50V
C50,60,63	1-130-475-00	CAP,MYLAR 0.0022 5% 50V
C31,55,121	1-130-476-00	CAP,MYLAR 0.0027 5% 50V
C30,54	1-130-480-00	CAP,MYLAR 0.0056 5% 50V
C39,99,100,107	1-130-483-00	CAP,MYLAR 0.01 5% 50V

Ref.No. or Q'ty	Part No.	Description
(CD-17 BOARD,BVH-2000PS,2180PS/CARD RACK)		
(Board No.1-606-075-14 & up)		
C127	1-130-484-00	CAP,MYLAR 0.012 5% 50V
C40	1-130-485-00	CAP,MYLAR 0.015 5% 50V
C38	1-130-487-00	CAP,MYLAR 0.022 5% 50V
C7,28,29,52,53,79,122, 126	1-130-491-00	CAP,MYLAR 0.047 5% 50V
C62,65	1-130-495-00	CAP,MYLAR 0.1 5% 50V
C5,6	1-131-345-00	CAP,TANT 0.47 10% 35V
C66	1-131-349-00	CAP,TANT 2.2 10% 35V
C74,75	1-131-350-00	CAP,TANT 3.3 10% 35V
C83,84,86,89	1-131-373-00	CAP,TANT 22 10% 16V
C87	1-131-374-00	CAP,TANT 33 10% 16V
CV1	1-141-260-00	TRIMER,CERAMIC
C3,4,12,16,17,19,20,22, 26,32,35,37,43,48,51, 58,59,67,69,71,72,73, 76,77,80,81,88,91,93, 96,98,101,102,104,105, 106,108,109,110,111, 114,116,119,124,125, 128,129,130,131,132, 133,135,137,138,139, 140,141,142,143,144, 145,146,147,149	1-162-596-00	CAP,CERAMIC 0.022 25V
R109,110	1-215-421-00	CAP,METAL 1K 1% 1/6W
R46	1-215-423-00	RES,METAL 1.2K 1% 1/6W
R41	1-215-427-00	RES,METAL 1.8K 1% 1/6W
R49	1-215-434-00	RES,METAL 3.6K 1% 1/6W
R15	1-215-435-00	RES,METAL 3.9K 1% 1/6W
R52	1-215-438-00	RES,METAL 5.1K 1% 1/6W
R8	1-215-440-00	RES,METAL 6.2K 1% 1/6W
R56	1-215-441-00	RES,METAL 6.8K 1% 1/6W
R27,63,67,73	1-215-444-00	RES,METAL 9.1K 1% 1/6W
R16,30,50,64,70,71,154, 155	1-215-445-00	RES,METAL 10K 1% 1/6W
R11,19,29,61,156,161	1-215-449-00	RES,METAL 15K 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(CD-17 BOARD,BVH-2000PS,2180PS/CARD RACK)		
(Borad No.1-606-075-14 & up)		
R13,14	1-215-452-00	RES,METAL 20K 1% 1/6W
R25,60	1-215-456-00	RES,METAL 30K 1% 1/6W
R55	1-215-463-00	RES,METAL 56K 1% 1/6W
R22	1-215-465-00	RES,METAL 68K 1% 1/6W
R21	1-215-469-00	RES,METAL 100K 1% 1/6W
RV14,15,16,17	1-224-938-00	RES,VAR,METAL 2K
RV402	1-224-939-00	RES,VAR,METAL 5K
RV2,3,6,7,8,9,10,11,12	1-224-940-00	RES,VAR,METAL 10K
RV13,401	1-224-941-00	RES,VAR,METAL 20K
RV5	1-224-942-00	RES,VAR,METAL 50K
RV4	1-228-120-00	RES,VAR,CERMET 20K
RV1	1-228-763-00	RES,VAR,CERMET 5K
RB1	1-235-109-00	RES BLOCK,22Kx8
R117	1-247-791-00	RES,CARBON 22 5% 1/6W
R57,176	1-247-799-00	RES,CARBON 47 5% 1/6W
R120	1-247-804-00	RES,CARBON 75 5% 1/6W
R163,190	1-247-807-00	RES,CARBON 100 5% 1/6W
R86	1-247-823-00	RES,CARBON 470 5% 1/6W
R24,28,75,79,147	1-247-831-00	RES,CARBON 1K 5% 1/6W
R65,66,72,74	1-247-835-00	RES,CARBON 1.5K 5% 1/6W
R43	1-247-837-00	RES,CARBON 1.8K 5% 1/6W
R44,59,68,144,145,174	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R12	1-247-842-00	RES,CARBON 3K 5% 1/6W
R4,42,45,69,146,153	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R129,159	1-247-850-00	RES,CARBON 6.2K 5% 1/6W
R94,98,122	1-247-851-00	RES,CARBON 6.8K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(CD-17 BOARD,BVH-2000PS,2180PS/CARD RACK)		
(Borad No.1-606-075-14 & up)		
R1,2,3,5,17,20,23,26,33, 38,39,48,53,54,62,76, 77,100,104,105,106,116, 119,125,130,131,141, 142,143,149,151,152, 160,162,164,165,167, 168,175,177,180,186, 187	1-247-855-00	RES,CARBON 10K 5% 1/6W
R158	1-247-857-00	RES,CARBON 12K 5% 1/6W
R136,137	1-247-858-00	RES,CARBON 13K 5% 1/6W
R95,97	1-247-859-00	RES,CARBON 15K 5% 1/6W
R115	1-247-861-00	RES,CARBON 18K 5% 1/6W
R40	1-247-862-00	RES,CARBON 20K 5% 1/6W
R36,37,82,88,89,91,133, 134,135,171,172,181, 184,185	1-247-863-00	RES,CARBON 22K 5% 1/6W
R157	1-247-864-00	RES,CARBON 24K 5% 1/6W
R170	1-247-865-00	RES,CARBON 27K 5% 1/6W
R6,7,35,118,173	1-247-866-00	RES,CARBON 30K 5% 1/6W
R114	1-247-867-00	RES,CARBON 33K 5% 1/6W
R107,108,121	1-247-869-00	RES,CARBON 39K 5% 1/6W
R9	1-247-870-00	RES,CARBON 43K 5% 1/6W
R99,101,102,103	1-247-871-00	RES,CARBON 47K 5% 1/6W
R128	1-247-873-00	RES,CARBON 56K 5% 1/6W
R58	1-247-876-00	RES,CARBON 75K 5% 1/6W
R123	1-247-878-00	RES,CARBON 91K 5% 1/6W
R10,34,80,96,112,113, 126,188	1-247-879-00	RES,CARBON 100K 5% 1/6W
R83	1-247-895-00	RES,CARBON 470K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(CD-17 BOARD,BVH-2000PS,2180PS/CARD RACK) (Borad No.1-606-075-14 & up)		
R47	1-247-901-00	RES,CARBON 820K 5% 1/6W
R85,189	1-247-903-00	RES,CARBON 1M 5% 1/6W
R111	1-249-433-11	RES,CARBON 22K 5% 1/6W
L1	1-408-421-00	INDUCTOR,MICRO,100 5%
L2,3,4	1-421-370-00	COIL,CHOKE
S3	1-516-925-21	SWITCH,DIP,8-CKT
S7	1-552-539-00	SWITCH,PUSH
S1,2	1-553-440-00	SWITCH,TOGGLE
S1(NS)	1-553-441-00	SWITCH,TOGGLE
S4,5,6	1-554-027-00	SWITCH,ROTARY
S8	1-554-080-00	SWITCH,ROTARY
TP4,5,8,9,10,11,14,15, 16,17,18,19,20,21,23, 24,30,31,401,402,403, 404,405		
()	3-657-703-01	TERMINAL,TP
TPE1,2,3,4,5,6		
()	3-673-805-11	TERMINAL,TP
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE,INDICATION, PC BOARD
1pc	() 3-674-628-00	LABEL(CD-17),PC BOARD
1pc	() 3-693-053-01	LABEL PS-NS (CD-17),PC BOARD
TP6,7,12,13		
()	3-693-032-01	TERMINAL,TP
1pc	7-621-981-15	SCREW,PSW 2.6x6
1pc	7-626-317-21	PIN,SPRING 2.5x8
D1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17, 18,19,20,21,22,23,24, 25,26,27,28,29,30,31, 32,33,34	8-719-815-55	DIODE 1S1555

Ref.No. or Q'ty	Part No.	Description
(CD-17 BOARD,BVH-2000PS,2180PS/CARD RACK) (Borad No.1-606-075-14 & up)		
Q4,5,10	8-729-105-71	TRANSISTOR 2SK523
Q3,8	8-729-364-12	TRANSISTOR 2SC641K
Q2,7,9	8-729-600-60	TRANSISTOR 2SA1115
IC11,13,14,15		
	8-741-123-90	IC BX1239
IC29,30	8-751-300-00	IC CX130
IC2B,5A,5Q,5R,6B,6D,6E, 6L	8-759-345-03	IC MC14503BCP,CMOS
IC2D,5H	8-759-045-38	IC MC14538BCP,CMOS
IC3,4,18	8-759-101-83	IC UPC649C
IC25	8-759-103-19	IC UPC319C
IC7	8-759-104-31	IC UPD74HC02C
IC22	8-759-131-11	IC UPC311C
IC1,10,12,16,24,28		
	8-759-145-58	IC UPC4558C
IC6M,6P,6R,6S,6U		
	8-759-182-53	IC UPD8253C-5,NMOS
IC6,21,5L	8-759-203-83	IC TC74HC4538P,CMOS
IC5E,5G	8-759-205-76	IC TC4013BP
IC3C,5F	8-759-240-11	IC TC4011BP,CMOS
IC32	8-759-240-51	IC TC4051BP,CMOS
IC5C	8-759-240-71	IC TC4071BP,CMOS
IC4B	8-759-240-81	IC TC4081BP,CMOS
IC4E,6F,6G		
	8-759-241-74	IC TC40174BP,CMOS
IC4D,5B	8-759-245-20	IC TC4520BP,CMOS
IC9	8-759-708-05	IC NJM78L05A
IC31	8-759-745-60	IC NJM4560D
IC3D	8-759-900-00	IC SN74LS00N,TTL
IC3E,4F,5P,5S,5V		
	8-759-900-04	IC SN74LS04N,TTL

Ref.No. or Q'ty	Part No.	Description
(CD-17 BOARD, BVH-2000PS, 2180PS/CARD RACK)		
(Borad No. 1-606-075-14 & up)		
IC5D	8-759-900-14	IC SN74LS14N, TTL
IC6H	8-759-900-32	IC SN74LS32N, TTL
IC3F, 5J, 6J	8-759-900-74	IC SN74LS74AN, TTL
IC4C	8-759-900-86	IC SN74LS86N, TTL
IC5K, 5M, 6K	8-759-901-07	IC SN74LS107AN, TTL
IC5N, 5T, 6C	8-759-901-38	IC SN74LS138N, TTL
IC23	8-759-901-53	IC SN74LS153N, TTL
IC5U	8-759-903-93	IC SN74LS393N, TTL
IC8	8-759-910-43	IC CX23028
IC2, 5, 17, 19, 20	8-759-990-82	IC TL082CP
IC26, 27	8-759-990-84	IC TL084CP
Q1, 6	8-761-622-00	TRANSISTOR 2SC1636

Ref.No. or Q'ty	Part No.	Description
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SR-15 BOARD (BVH-2000PS, 2180PS/CARD RACK)

1pc	() A-6015-073-A	COMPLETE PCB, SR-15 (This assembly includes the following parts.)
1pc	() X-3673-641-0	PLATE ASSY, SHIELD
C111	1-102-106-00	CAP, CERAMIC 100PF 10% 50V
C20, 110	1-102-112-00	CAP, CERAMIC 330PF 10% 50V
C40	1-102-115-00	CAP, CERAMIC 560PF 10% 50V
C100	1-107-048-00	CAP, MICA 6.8PF +/-0.5PF 500V
C101	1-107-077-00	CAP, MICA 47PF 5% 50V
C13	1-107-085-00	CAP, MICA 100PF 5% 50V
C21, 68, 69, 76	1-107-093-00	CAP, MICA 220PF 5% 50V
C65	1-107-160-00	CAP, MICA 36PF 5% 500V
C15, 16	1-107-164-00	CAP, MICA 51PF 5% 500V
C34	1-107-166-00	CAP, MICA 62PF 5% 500V
C36	1-107-202-00	CAP, MICA 10PF 5% 500V
C64, 112	1-107-206-00	CAP, MICA 15PF 5% 500V
C67	1-107-210-00	CAP, MICA 22PF 5% 500V
C9, 10, 26, 87	1-108-555-00	CAP, MYLAR 0.001 5% 50V
C48	1-108-559-00	CAP, MYLAR 0.0015 5% 50V
C70, 80	1-108-563-00	CAP, MYLAR 0.0022 5% 50V
C84	1-108-571-00	CAP, MYLAR 0.0047 5% 50V
C99	1-108-575-00	CAP, MYLAR 0.0068 5% 50V
C66, 71, 91	1-108-579-00	CAP, MYLAR 0.01 5% 50V
C6, 59	1-108-587-00	CAP, MYLAR 0.022 5% 50V
C98	1-108-591-00	CAP, MYLAR 0.033 5% 50V

Ref.No. or Q'ty	Part No.	Description
(SR-15 BOARD,CARD RACK)		
C33,78,79,102	1-108-595-00	CAP,MYLAR 0.047 5% 50V
C19,103	1-108-603-00	CAP,MYLAR 0.1 5% 50V
C11	1-109-553-00	CAP,MICA 470PF 5% 100V
C75	1-109-561-00	CAP,MICA 0.001 5% 100V
C41	1-123-611-00	CAP,ELECT 1 50V
C60	1-123-616-00	CAP,ELECT 4.7 25V
C63	1-123-818-00	CAP,ELECT 22 25V
C3,4,5,23,24,25,27,28, 35,37,38,42,43,44,46, 49,53,56,58	1-123-821-00	CAP,ELECT 47 16V
C14,62,73,77,82,83,86, 89	1-123-822-00	CAP,ELECT 47 10V
C93	1-124-141-00	CAP,ELECT 330 10V
C1,2,31,90	1-131-347-00	CAP,TANT 1 10% 35V
C7,8	1-131-373-00	CAP,TANT 22 10% 16V
C12,17,18,22,29,30,39, 45,47,50,51,52,54,55, 57,61,72,74,81,85,88, 92,94,95,96,97	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
R51	1-214-118-00	RES,METAL 270 1% 1/4W
R53	1-214-120-00	RES,METAL 330 1% 1/4W
R15	1-214-130-00	RES,METAL 820 1% 1/4W
R54	1-214-134-00	RES,METAL 1.2K 1% 1/4W
R19	1-214-146-00	RES,METAL 3.9K 1% 1/4W
R18	1-214-156-00	RES,METAL 10K 1% 1/4W
R135	1-214-173-00	RES,METAL 51K 1% 1/4W
RV3	1-224-936-00	RES,VAR,METAL 500
RV4	1-224-938-00	RES,VAR,METAL 2K
RV6,7	1-224-941-00	RES,VAR,METAL 20K
RV1,2	1-224-943-00	RES,VAR,METAL 100K
RV5	1-230-741-21	RES,VAR,CARBON 10K

Ref.No. or Q'ty	Part No.	Description
(SR-15 BOARD,CARD RACK)		
R104,107,108,130,131, 132,146	1-247-783-00	RES,CARBON 10 5% 1/6W
R77,79,88	1-247-800-00	RES,CARBON 51 5% 1/6W
R46,87	1-247-804-00	RES,CARBON 75 5% 1/6W
R56,60,144,160	1-247-807-00	RES,CARBON 100 5% 1/6W
R21	1-247-811-00	RES,CARBON 150 5% 1/6W
R65,155	1-247-814-00	RES,CARBON 200 5% 1/6W
R158,170	1-247-815-00	RES,CARBON 220 5% 1/6W
R57	1-247-816-00	RES,CARBON 240 5% 1/6W
R78,117,124,154	1-247-823-00	RES,CARBON 470 5% 1/6W
R42	1-247-825-00	RES,CARBON 560 5% 1/6W
R24,134	1-247-827-00	RES,CARBON 680 5% 1/6W
R26,41,45,52,71,72,91, 94,101,103,110,111, 120,123,125	1-247-831-00	RES,CARBON 1K 5% 1/6W
R23,29,31	1-247-835-00	RES,CARBON 1.5K 5% 1/6W
R40,68,70	1-247-838-00	RES,CARBON 2K 5% 1/6W
R55,62,64,142	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R95	1-247-840-00	RES,CARBON 2.4K 5% 1/6W
R2,85,86,162	1-247-842-00	RES,CARBON 3K 5% 1/6W
R22,121,143	1-247-843-00	RES,CARBON 3.3K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description	Ref.No. or Q'ty	Part No.	Description
(SR-15 BOARD,CARD RACK)			(SR-15 BOARD,CARD RACK)		
R27	1-247-844-00	RES,CARBON 3.6K 5% 1/6W	R98	1-247-894-00	RES,CARBON 430K 5% 1/6W
R67	1-247-846-00	RES,CARBON 4.3K 5% 1/6W	R137	1-247-895-00	RES,CARBON 470K 5% 1/6W
R34,36,58	1-247-847-00	RES,CARBON 4.7K 5% 1/6W	R6	1-247-896-00	RES,CARBON 510K 5% 1/6W
			R157,159	1-247-901-00	RES,CARBON 820K 5% 1/6W
R20,47,74,82,112,113					
	1-247-848-00	RES,CARBON 5.1K 5% 1/6W	R7,8,44,63,84		
				1-247-903-00	RES,CARBON 1M 5% 1/6W
R161	1-247-850-00	RES,CARBON 6.2K 5% 1/6W			
R1	1-247-852-00	RES,CARBON 7.5K 5% 1/6W	LV1	1-407-569-00	INDUCTOR,VAR,10
			L1	1-408-415-00	INDUCTOR,MICRO,33 5%
R9,13,16,17,25,48,59,61, 76,89,90,92,93,100,102, 141,151,156			DL1	1-415-121-00	DELAY LINE,100nS
	1-247-855-00	RES,CARBON 10K 5% 1/6W	L2,3,4	1-421-370-00	COIL,CHOKE
			ME1	1-520-449-00	METER
R10,14,37,49,171			CF1	1-527-497-00	FILTER,CERAMIC 4.55MHz
	1-247-859-00	RES,CARBON 15K 5% 1/6W	X1	1-527-521-00	CRYSTAL,17.732475MHz
			S1,2	1-553-440-00	SWITCH,TOGGLE
			1pc	2-282-313-11	KNOB,CONTROL
R50,118,119					
	1-247-861-00	RES,CARBON 18K 5% 1/6W	TP2,5,8,9,12,13,14,15, 16,22,23		
			() 3-657-703-01		TERMINAL,TP
R73,80,83,96					
	1-247-862-00	RES,CARBON 20K 5% 1/6W	TPE1,2,3,4,5		
			() 3-673-805-11		TERMINAL,TP
R4,122,126,127,128,139, 148,150,152					
	1-247-863-00	RES,CARBON 22K 5% 1/6W			
R30	1-247-866-00	RES,CARBON 30K 5% 1/6W			
R28,33,97,99					
	1-247-871-00	RES,CARBON 47K 5% 1/6W			
R5,39	1-247-872-00	RES,CARBON 51K 5% 1/6W			
R43	1-247-875-00	RES,CARBON 68K 5% 1/6W			
R11,12,35,38,66,136,140, 147,149					
	1-247-879-00	RES,CARBON 100K 5% 1/6W			
R32	1-247-883-00	RES,CARBON 150K 5% 1/6W			
R3	1-247-886-00	RES,CARBON 200K 5% 1/6W			
R81,138	1-247-892-00	RES,CARBON 360K 5% 1/6W			
R75	1-247-893-00	RES,CARBON 390K 5% 1/6W			

Ref.No. or Qty	Part No.	Description
(SR-15 BOARD,CARD RACK)		
1pc	() 3-673-865-00	LEVER,WITH PIN
1pc	() 3-673-867-00	PLATE, INDICATION, PC BOARD
1pc	() 3-674-626-00	LABEL(SR-15),PC BOARD
TP1,3,4,17,25		
	() 3-693-032-01	TERMINAL,TP
1pc	7-621-737-08	SET SCREW, 2.6x3,FLAT POINT
4pcs	7-621-981-15	SCREW,PSW 2.6x6
2pcs	() 7-626-317-21	PIN,SPRING 2.5x8
D7	8-719-100-27	DIODE RD4.7E-B2
D6	8-719-175-07	DIODE RD7.5E
D2	8-719-713-92	DIODE 1S2139B
D1,3,4,8,9,10,11,12,13, 14,15,16		
	8-719-815-55	DIODE 1S1555
Q10	8-723-305-00	TRANSISTOR 2SK43-5
Q5	8-729-117-54	TRANSISTOR 2SA1175
Q3,4	8-729-364-12	TRANSISTOR 2SC641K
Q2,7,8,13,14,15,16,19		
	8-729-603-50	TRANSISTOR 2SC403SP
Q17,18	8-729-606-32	TRANSISTOR 2SC2603
IC12,13	8-743-931-10	IC BX3931A
IC3	8-749-938-10	IC BX381
IC6	8-751-300-00	IC CX130
IC3K,4I,4K		
	8-759-045-38	IC MC14538BCP,CMOS
IC15,16	8-759-103-92	IC UPC318C
IC4J,5D	8-759-240-11	IC TC4011BP,CMOS
IC3E,3N,5I,5L		
	8-759-240-13	IC TC4013BP,CMOS
IC5F,5H	8-759-240-15	IC TC4015BP,CMOS
IC5K	8-759-240-40	IC TC4040BP,CMOS
IC5M	8-759-240-71	IC TC4071BP,CMOS

Ref.No. or Qty	Part No.	Description
(SR-15 BOARD,CARD RACK)		
IC4N	8-759-241-74	IC TC40174BP,CMOS
IC4M,5N	8-759-345-03	IC HD14503BP,CMOS
IC3D,3H	8-759-900-00	IC SN74LS00N,TTL
IC5G	8-759-900-02	IC SN74LS02N,TTL
IC3C,3J,3O,4O		
	8-759-900-04	IC SN74LS04N,TTL
IC4D	8-759-900-08	IC SN74LS08N,TTL
IC3L,5C	8-759-900-32	IC SN74LS32N,TTL
IC4B,4E,4F,4H		
	8-759-900-74	IC SN74LS74AN,TTL
IC3M	8-759-900-86	IC SN74LS86N,TTL
IC4C,4L	8-759-901-07	IC SN74LS107AN,TTL
IC2C,2D,2E		
	8-759-901-12	IC SN74LS112AN,TTL
IC5J	8-759-901-57	IC SN74LS157N,TTL
IC4G	8-759-901-63	IC SN74LS163AN,TTL
IC3F	8-759-901-64	IC SN74LS164N,TTL
IC3I	8-759-902-21	IC SN74LS221N,TTL
IC2F	8-759-910-10	IC SN74S10N,TTL
IC2G	8-759-910-11	IC SN74S11N,TTL
IC5E	8-759-911-63	IC SN74S163N,TTL
IC9	8-759-918-23	IC NE527N
IC3B	8-759-941-23	IC SN74123N,TTL
IC14	8-759-951-07	IC SN75107AN
IC1,2,4,5,7,8		
	8-759-990-82	IC TL082CP
Q9	8-761-622-00	TRANSISTOR 2SC1636
Q1,6,11,12		
	8-769-192-00	TRANSISTOR 2SK43-2

Ref.No. or Q'ty	Part No.	Description
<u>DT-05 BOARD. (BVH-2000PS-02,04,12,14/2180PS-02,04)</u>		
1pc (for 02/04/12/14 model)		
() A-6015-074-B	COMPLETE PCB,DT-05	
(This assembly includes the following parts.)		
1pc () X-3673-678-0	PLATE ASSY,SHIELD(A)	
C1,2	1-107-077-00	CAP,MICA 47PF 5% 50V
C4	1-107-206-00	CAP,MICA 15PF 5% 500V
C74	1-109-535-00	CAP,MICA 100PF 5% 100V
C47,52,69,75	1-109-540-00	CAP,MICA 180PF 5% 100V
C66,72	1-109-542-00	CAP,MICA 220PF 5% 100V
C70	1-109-547-00	CAP,MICA 330PF 5% 100V
C67,68,71,73	1-109-561-00	CAP,MICA 0.001 5% 100V
C3,45,83,86,90,91,92,93, 117,118	1-123-356-00	CAP,ELECT 10 50V
C6,11,17,23,25,33,34,36, 38	1-130-471-00	CAP,MYLAR 0.001 5% 50V
C32,35	1-130-473-00	CAP,MYLAR 0.0015 5% 50V
C31,37,40,42,53,80	1-130-475-00	CAP,MYLAR 0.0022 5% 50V
C8,19,20,24,27,28,41,76	1-130-479-00	CAP,MYLAR 0.0047 5% 50V
C26,62,63	1-130-483-00	CAP,MYLAR 0.01 5% 50V
C7,48,60	1-130-484-00	CAP,MYLAR 0.012 5% 50V
C18,65,119	1-130-485-00	CAP,MYLAR 0.015 5% 50V
C5,10	1-130-487-00	CAP,MYLAR 0.022 5% 50V
C13,14	1-130-491-00	CAP,MYLAR 0.047 5% 50V
C64	1-130-493-00	CAP,MYLAR 0.068 5% 50V
C21,43,44	1-131-341-00	CAP,TANT 0.1 10% 35V

Ref.No. or Q'ty	Part No.	Description
(DT-05 BOARD,CARD RACK)		
C15,16	1-131-342-00	CAP,TANT 0.15 10% 35V
C61	1-131-343-00	CAP,TANT 0.22 10% 35V
C9,12	1-131-345-00	CAP,TANT 0.47 10% 35V
C22,39	1-131-351-00	CAP,TANT 4.7 10% 35V
C29,30	1-131-380-00	CAP,TANT 33 10% 10V
C46,77,78,79,81,82,85, 88,89,94,95,96,97,98, 99,100,101,102,103,104, 105,106,107,108,109, 110,111,112,113	1-161-051-00	CAP,CERAMIC 0.01 10% 50V
R63,64,67,68	1-214-112-00	RES,METAL 150 1% 1/4W
R119	1-214-120-00	RES,METAL 330 1% 1/4W
R2,35,65,110	1-214-124-00	RES,METAL 470 1% 1/4W
R12,13,45,46,112,127	1-214-132-00	RES,METAL 1K 1% 1/4W
R39	1-214-136-00	RES,METAL 1.5K 1% 1/4W
R15,16,18,40,49,55	1-214-139-00	RES,METAL 2K 1% 1/4W
R14,48,80,81,82,84,142	1-214-143-00	RES,METAL 3K 1% 1/4W
R21,69,70,72,97	1-214-148-00	RES,METAL 4.7K 1% 1/4W
R34,51	1-214-151-00	RES,METAL 6.2K 1% 1/4W
R8	1-214-152-00	RES,METAL 6.8K 1% 1/4W
R66,113	1-214-154-00	RES,METAL 8.2K 1% 1/4W
R85	1-214-155-00	RES,METAL 9.1K 1% 1/4W
R17,24,26,27,43,53,58, 59,60,62,83,86,88,102, 106,107,108,109,123, 125,129,130,131,132, 134,137,140	1-214-156-00	RES,METAL 10K 1% 1/4W
R11,36	1-214-159-00	RES,METAL 13K 1% 1/4W

Ref.No. or Q'ty	Part No.	Description
(DT-05 BOARD,CARD RACK)		
R7,78,79,90	1-214-160-00	RES,METAL 15K 1% 1/4W
R10,18	1-214-162-00	RES,METAL 18K 1% 1/4W
R95,118,126	1-214-163-00	RES,METAL 20K 1% 1/4W
R1,4,121,122	1-214-164-00	RES,METAL 22K 1% 1/4W
R28,100,143,145	1-214-165-00	RES,METAL 24K 1% 1/4W
R19,31	1-214-166-00	RES,METAL 27K 1% 1/4W
R124,128	1-214-170-00	RES,METAL 39K 1% 1/4W
R74,77,93	1-214-172-00	RES,METAL 47K 1% 1/4W
R144	1-214-175-00	RES,METAL 62K 1% 1/4W
R41,42,56,57	1-214-176-00	RES,METAL 68K 1% 1/4W
R29	1-214-178-00	RES,METAL 82K 1% 1/4W
R22,71,73,75,76,91,92, 103	1-214-179-00	RES,METAL 91K 1% 1/4W
R20,23,25,38,44,47,54, 89,101,104,105,111,114, 115,116,120,135,141	1-214-180-00	RES,METAL 100K 1% 1/4W
R9,87,94	1-224-938-00	RES,VAR,METAL 2K
R33,99	1-224-939-00	RES,VAR,METAL 5K
R3,5,6,50,52,96,98,138	1-224-940-00	RES,VAR,METAL 10K
R61	1-224-941-00	RES,VAR,METAL 20K
R30	1-224-942-00	RES,VAR,METAL 50K
R139	1-224-943-00	RES,VAR,METAL 100K
RB2	1-231-407-00	RES BLOCK,2.2Kx8

Ref.No. or Q'ty	Part No.	Description
(DT-05 BOARD,CARD RACK)		
RB1	1-231-410-00	RES BLOCK,10Kx8
RB3	1-231-517-00	RES BLOCK,2.2Kx4
R146	1-247-873-00	RES,CARBON 56K 5% 1/6W
R37	1-247-891-00*	RES,CARBON 330K 5% 1/6W
R117	1-247-895-00	RES,CARBON 470K 5% 1/6W
R147	1-249-432-11	RES,CARBON 18K 5% 1/6W
L1	1-421-370-00	COIL,CHOKE
S1	1-516-923-21	SWITCH,DIP,4-CKT
X1	1-527-227-00	CRYSTAL,14.31818MHZ
S3,4	1-552-509-00	SWITCH,DIP,1-CKT
S2	1-553-440-00	SWITCH,TOGGLE
TP1,2,3,4,5,6,7,8,9,10 () 3-693-032-01		TERMINAL,TP
TPE1,2,3 () 3-673-805-11		TERMINAL,TP
1pc () 3-673-865-00		LEVER,WITH PIN
1pc () 3-673-867-00		PLATE,INDICATION, PC BOARD
1pc () 3-674-625-03		LABEL(DT-05),PC BOARD
4pcs 7-621-981-15		SCREW,PSW2.6x6
2pcs () 7-626-317-21		PIN,SPRING 2.5x8
D8,9 8-719-156-07		DIODE RD5.6E-B
D1,2,3,4,5,6,7,10,11 8-719-911-19		DIODE 1SS119
Q1 8-729-190-12		TRANSISTOR 2SC2901
IC2K 8-759-014-96		IC MC1496P
IC3H 8-759-040-46		IC MC14046BCP,CMOS
IC3G 8-759-045-26		IC MC14526BCP,CMOS
IC50 8-759-045-57		IC MC14557BCP,CMOS
IC1F,1H,1N,2J,2M,2P 8-759-145-58		IC UPC4558C
IC5H,5I 8-759-200-55		IC TC40H390P,CMOS
IC4M 8-759-240-01		IC TC4001BP,CMOS
IC3D,4D 8-759-240-08		IC TC4008BP,CMOS
IC40,4Q 8-759-240-11		IC TC4011BP,CMOS

Ref.No. or Q'ty	Part No.	Description
(DT-05 BOARD,CARD RACK)		
IC3I,4I,4J	8-759-240-13	IC TC4013BP,CMOS
IC3P	8-759-240-15	IC TC4015BP,CMOS
IC2E	8-759-240-28	IC TC4028BP,CMOS
IC4G	8-759-240-43	IC TC4043BP,CMOS
IC3L,5L	8-759-240-69	IC TC4069UBP,CMOS
IC4L	8-759-240-71	IC TC4071BP,CMOS
IC5J	8-759-240-73	IC TC4073BP,CMOS
IC4H,4K,5G	8-759-240-81	IC TC4081BP,CMOS
IC3E	8-759-241-75	IC TC40175BP,CMOS
IC5F	8-759-245-12	IC TC4512BP,CMOS
IC5M	8-759-345-38	IC HD14538BP,CMOS
IC5D	8-759-900-00	IC SN74LS00N,TTL
IC3K,3Q,4A,5P	8-759-900-02	IC SN74LS02N,TTL
IC2B	8-759-900-10	IC SN74LS10N,TTL
IC3N,5E	8-759-900-74	IC SN74LS74AN,TTL
IC2C	8-759-900-85	IC SN74LS85N,TTL
IC1Q	8-759-901-63	IC SN74LS163AN,TTL
IC5N	8-759-901-64	IC SN74LS164N,TTL
IC1C,1D,2D	8-759-901-74	IC SN74LS174N,TTL
IC20,5C	8-759-901-75	IC SN74LS175N,TTL
IC1A,1B,3A,3B,4B	8-759-901-91	IC SN74LS191N,TTL
IC2,3F,3J,3M,3O,4F,5K	8-759-902-21	IC SN74LS221N,TTL
IC4C	8-759-903-74	IC SN74LS374N,TTL
IC5B	8-759-903-93	IC SN74LS393N,TTL
IC1	8-759-906-07	IC TL607CP
IC2A,4E	8-759-906-69	IC SN74LS669N,TTL

Ref.No. or Q'ty	Part No.	Description
(DT-05 BOARD,CARD RACK)		
IC1I,1M,2H	8-759-921-91	IC TL191CN
IC4N	8-759-974-06	IC SN7406N,TTL
IC1E	8-759-980-02	IC DAC1C8BC
IC1P,2F,2N	8-759-990-04	IC TL074CN
IC1J,1L,2I	8-759-990-72	IC TL072CP

MB-14A BOARD (BVH-2000PS,2180PS/CARD RACK)

1pc () A-6025-092-A COMPLETE PCB,MB-14
(This assembly includes the following parts.)

C2	1-125-235-00	CAP,ELECT 0.47F 5V
C1	1-161-051-00	CAP,CERAMIC 0.01 10% 50V

R1 1-213-132-00 Δ RES,METAL 120 5% 1W

R2 1-247-214-00 Δ RES,CARBON 82 5% 1/2W

CN331,332,333,334,335,
336,337,338,339,340,
341,342,343,344,345,
346,347,348
1-508-892-00 CONNECTOR,PCB,100P

CN327M,402M,403M
() 1-560-300-00 RECEP,3P,MALE

CN401M () 1-560-301-00 RECEP,4P,MALE

CN303M,306M
() 1-560-304-00 RECEP,8P,MALE

CN302M,305M
() 1-560-305-00 RECEP,10P,MALE

Ref.No. or Q'ty	Part No.	Description
(MB-14A BOARD,CARD RACK)		
CN301M,304M		
()	1-560-306-00	RECEP,12P,MALE
CN317M	() 1-560-726-00	RECEP,20P,MALE
CN315M,324M		
()	1-560-727-00	RECEP,26P,MALE
CN314M,325M		
()	1-560-728-00	RECEP,30P,MALE
CN323M	() 1-560-729-00	RECEP,34P,MALE
CN322M	() 1-560-730-00	RECEP,40P,MALE
CN313M	() 1-560-731-00	RECEP,50P,MALE
CN316M,326M		
()	1-560-732-00	RECEP,60P,MALE
CN321M	() 1-560-753-00	RECEP,5P,MALE
CN307M,308M,309M,310M, 311M,312M		
	1-561-365-00	RECEP,COAXIAL,MALE
17pcs	7-686-527-01	SCREW,PSW 3x6
D3	8-719-200-02	DIODE 10E2
D1,2	8-719-815-55	DIODE 1S1555

Ref.No. or Q'ty	Part No.	Description
AP-12 BOARD (BVH-2000PS-00,02,10,12/2180PS-00,02)		
1pc (for 00/02/10/12 model)		
() A-6013-068-A COMPLETE PCB,AP-12		
(This assembly includes the following parts.)		
C116,216,316		
	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C101,201	1-107-042-00	CAP,MICA 2.2PF +/-0.5PF 500V
C511	1-107-173-00	CAP,MICA 150PF 5% 500V
C106,206,306		
	1-107-204-00	CAP,MICA 12PF 5% 500V
C301	1-107-208-00	CAP,MICA 18PF 5% 500V
C503,686	1-108-560-00	CAP,MYLAR 0.0016 5% 50V
C117,217	1-109-528-00	CAP,MICA 51PF 5% 100V
C317,322	1-109-531-00	CAP,MICA 68PF 5% 100V
C114,214	1-109-534-00	CAP,MICA 91PF 5% 100V
C314	1-109-545-00	CAP,MICA 270PF 5% 100V
C681	1-109-547-00	CAP,MICA 330PF 5% 100V
C102,202,601,621		
	1-109-549-00	CAP,MICA 390PF 5% 100V
C703	1-109-556-00	CAP,MICA 620PF 5% 100V
C121,221	1-109-588-00	CAP,MICA 0.002 5% 500V
C321	1-109-595-00	CAP,MICA 0.0039 5% 500V
C113,213,313		
	1-109-668-00	CAP,MICA 62PF 5% 500V
C702	1-124-002-11	CAP,ELECT,NONPOLAR 1 50V
C701	1-124-006-11	CAP,ELECT,NONPOLAR 10 50V
C1,2,110,111,210,211, 310,311	1-124-445-00	CAP,ELECT 100 20% 16V
C688	1-124-472-11	CAP,ELECT 470 20% 10V
C104,204,304,610,613, 630,633,650,653,684, 685	1-124-477-11	CAP,ELECT 47 20% 25V
C119,120,219,220,319, 320,504,505,507,508, 604,605,624,625,644, 645	1-124-896-00	CAP,ELECT 33 20% 16V

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-00,02,10,12/2180PS-00,02,TTP)		
C689	1-124-907-00	CAP,ELECT 10 20% 50V
C641	1-130-473-00	CAP,MYLAR 0.0015 5% 50V
C704	1-130-477-00	CAP,MYLAR 0.0033 5% 50V
C506	1-130-479-00	CAP,MYLAR 0.0047 5% 50V
C642	1-130-483-00	CAP,MYLAR 0.01 5% 50V
C682	1-130-485-00	CAP,MYLAR 0.015 5% 50V
C602,622	1-130-487-00	CAP,MYLAR 0.022 5% 50V
C107,207,307	1-130-495-00	CAP,MYLAR 0.1 5% 50V
C510	1-130-497-00	CAP,MYLAR 0.15 5% 50V
C108,115,208,215,308,315	1-131-351-00	CAP,TANT 4.7 10% 35V
C118,218,318,513,609, 629,649	1-131-353-00	CAP,TANT 10 10% 35V
C514	1-131-381-00	CAP,TANT 47 10% 10V
C519	1-131-427-00	CAP,TANT 220 20% 6.3V
C105,205,305,518,608, 628,648	1-131-429-00	CAP,TANT 470 20% 3.15V
C3,4,103,109,112,203, 209,212,303,309,312, 611,612,631,632,651, 652	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
C11,12,13	1-163-168-00	CAP,CHIP CERAMIC 30PF 5% 50V
R516	1-210-828-00	RES,CARBON 4.7M 5% 1/4W
R524	1-215-412-00	RES,METAL 430 1% 1/6W
R329,332	1-215-418-00	RES,METAL 750 1% 1/6W
R302	1-215-428-00	RES,METAL 2K 1% 1/6W
R101,201,301	1-215-440-00	RES,METAL 6.2K 1% 1/6W
R110,210,310,682	1-215-442-00	RES,METAL 7.5K 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-00,02,10,12/2180PS-00,02,TTP)		
R511	1-215-448-00	RES,METAL 13K 1% 1/6W
R102,202,602,622	1-215-454-00	RES,METAL 24K 1% 1/6W
R127,128,227,228,327, 328	1-215-462-00	RES,METAL 51K 1% 1/6W
R520	1-215-470-00	RES,METAL 110K 1% 1/6W
R115,116,215,216,315, 316	1-247-783-00	RES,CARBON 10 5% 1/6W
R605,625,645	1-247-793-00	RES,CARBON 27 5% 1/6W
R105,205,305,685	1-247-799-00	RES,CARBON 47 5% 1/6W
R118,218,318	1-247-803-00	RES,CARBON 68 5% 1/6W
R106,120,121,206,220, 221,306,320,321,509, 517,688,689	1-247-807-00	RES,CARBON 100 5% 1/6W
R131,231,331	1-247-815-00	RES,CARBON 220 5% 1/6W
R606,626,646,686	1-247-817-00	RES,CARBON 270 5% 1/6W
R601,621	1-247-827-00	RES,CARBON 680 5% 1/6W
R507,508,518,608,609, 628,629,648,649,681	1-247-831-00	RES,CARBON 1K 5% 1/6W
R514,641	1-247-833-00	RES,CARBON 1.2K 5% 1/6W
R129,132,133,229,232, 233,333,523	1-247-835-00	RES,CARBON 1.5K 5% 1/6W
R104,204,304,505	1-247-839-00	RES,CARBON 2.2K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-00, 02, 10, 12/2180PS-00, 02, TTP)		
R123, 223, 501, 502	1-247-843-00	RES, CARBON 3.3K 5% 1/6W
R113, 117, 119, 213, 217, 219, 313, 317, 319	1-247-847-00	RES, CARBON 4.7K 5% 1/6W
R108, 208, 308	1-247-849-00	RES, CARBON 5.6K 5% 1/6W
R109, 111, 209, 211, 309, 311, 323, 642	1-247-851-00	RES, CARBON 6.8K 5% 1/6W
R324, 510	1-247-857-00	RES, CARBON 12K 5% 1/6W
R503	1-247-859-00	RES, CARBON 15K 5% 1/6W
R103, 203, 303	1-247-861-00	RES, CARBON 18K 5% 1/6W
R107, 112, 122, 125, 207, 212, 222, 225, 307, 312, 322, 325, 512, 513, 519, 525	1-247-863-00	RES, CARBON 22K 5% 1/6W
R124, 224	1-247-867-00	RES, CARBON 33K 5% 1/6W
R526, 701	1-247-871-00	RES, CARBON 47K 5% 1/6W
R126, 130, 226, 230, 326, 330, 522, 703	1-247-879-00	RES, CARBON 100K 5% 1/6W
R114, 214, 314	1-247-887-00	RES, CARBON 220K 5% 1/6W
R521, 702	1-247-893-00	RES, CARBON 390K 5% 1/6W
R604, 624	1-247-897-00	RES, CARBON 560K 5% 1/6W
R504, 644, 684	1-247-903-00	RES, CARBON 1M 5% 1/6W
L301	1-408-423-00	INDUCTOR, MICRO, 150 5%
L101, 201	1-408-427-00	INDUCTOR, MICRO, 330 5%
L501, 681	1-408-428-00	INDUCTOR, MICRO, 390 5%
LV101, 201, 301	1-407-301-00	INDUCTOR, VAR, 9mH

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-00, 02, 10, 12/2180PS-00, 02, TTP)		
L102, 202	1-407-502-00	INDUCTOR, MICRO, 6.8mH 5%
RY501	1-515-477-00	RELAY, 12V
RY101, 201, 301	1-515-518-00	RELAY, 5V
FB1, 2	1-535-178-00	FERRITE BEAD
CN361M ()	1-560-302-00	RECEP, 5P, MALE
CN360M ()	1-560-304-00	RECEP, 8P, MALE
CN363M ()	1-560-305-00	RECEP, 10P, MALE
CN364M ()	1-560-306-00	RECEP, 12P, MALE
CN354M, 355M	() 1-560-310-00	RECEP, 4P, MALE
CN353M ()	1-560-311-00	RECEP, 5P, MALE
CN351M ()	1-560-312-00	RECEP, 6P, MALE
CN356M ()	1-560-313-00	RECEP, 8P, MALE
CN357M ()	1-560-314-00	RECEP, 10P, MALE
CN350M, 352M	() 1-560-315-00	RECEP, 12P, MALE
TP101, 102, 103, 201, 202, 203, 301, 302, 303, 501	() 3-673-703-01	TERMINAL, TP
TPE101, 102, 201, 202, 301, 302, 501	() 3-657-703-01	TERMINAL, TP
2pcs	7-686-527-01	SCREW, PSW 3x6
D101, 201, 301, 501, 502, 503, 504, 701	8-719-815-55	DIODE 1S1555
D505, D506, D507	8-719-930-33	LED, GL3PR3, RED
Q102, 103, 202, 203, 302, 303	8-729-102-35	TRANSISTOR 2SK162
Q101, 105, 106, 201, 205, 206, 301, 305, 306	8-729-307-58	TRANSISTOR 2SC1775A

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-00,02,10,12/2180PS-00,02,TTP)		
Q109,209,309,602,622, 642	8-729-373-92	TRANSISTOR 2SB739
Q108,208,308,501,601, 621,641	8-729-378-84	TRANSISTOR 2SD788
Q107,207,307	8-729-387-28	TRANSISTOR 2SA872-E
Q104,204,304	8-729-679-82	TRANSISTOR 2SA798
IC501,601,602,603,605	8-759-602-01	IC M5220P
IC101,201,301	8-759-745-59	IC NJM4559D
IC502	8-759-990-82	IC TL082CP
Q502	8-761-622-00	TRANSISTOR 2SC1636
Q503,701	8-769-192-00	TRANSISTOR 2SK43-2

AP-12 BOARD (BVH-2000PS-04,14/2180PS-04/TTP)

1pc (for 04,14 model)

() A-6013-069-A COMPLETE PCB, AP-12
(This assembly includes the following parts.)

C116,216,316,416	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C101,201,401	1-107-042-00	CAP,MICA 2.2PF +/-0.5PF 500V
C106,206,306,406	1-107-204-00	CAP,MICA 12PF 5% 500V

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-04,14/2180PS-04,TTP)		
C301	1-107-208-00	CAP,MICA 18PF 5% 500V
C503,686	1-108-560-00	CAP,MYLAR 0.0016 5% 50V
C117,217,417	1-109-528-00	CAP,MICA 51PF 5% 100V
C317,322	1-109-531-00	CAP,MICA 68PF 5% 100V
C114,214,414	1-109-534-00	CAP,MICA 91PF 5% 100V
C314	1-109-545-00	CAP,MICA 270PF 5% 100V
C681	1-109-547-00	CAP,MICA 330PF 5% 100V
C102,202,402,601,621, 661	1-109-549-00	CAP,MICA 390PF 5% 100V
C703	1-109-556-00	CAP,MICA 620PF 5% 100V
C121,221,421	1-109-588-00	CAP,MICA 0.002 5% 500V
C321	1-109-595-00	CAP,MICA 0.0039 5% 500V
C113,213,313,413	1-109-668-00	CAP,MICA 62PF 5% 500V
C702	1-124-002-11	CAP,ELECT, NONPOLAR 1 50V
C701	1-124-006-11	CAP,ELECT, NONPOLAR 10 50V
C1,2,110,111,210,211, 310,311,410,411	1-124-445-00	CAP,ELECT 100 20% 16V
C104,204,304,404,610, 613,630,633,650,653, 670,673,684,685	1-124-477-11	CAP,ELECT 47 20% 25V
C119,120,219,220,319, 320,419,420,504,505, 507,508,604,605,624, 625,644,645,664,665	1-124-896-00	CAP,ELECT 33 20% 16V
C689	1-124-907-00	CAP,ELECT 10 20% 50V

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
C641	1-130-473-00	CAP, MYLAR 0.0015 5% 50V
C704	1-130-477-00	CAP, MYLAR 0.0033 5% 50V
C506	1-130-479-00	CAP, MYLAR 0.0047 5% 50V
C642	1-130-483-00	CAP, MYLAR 0.01 5% 50V
C682	1-130-485-00	CAP, MYLAR 0.015 5% 50V
C602, 622, 662	1-130-487-00	CAP, MYLAR 0.022 5% 50V
C107, 207, 307, 407	1-130-495-00	CAP, MYLAR 0.1 5% 50V
C510	1-130-497-00	CAP, MYLAR 0.15 5% 50V
C108, 115, 208, 215, 308, 315, 408, 415	1-131-351-00	CAP, TANT 4.7 10% 35V
C118, 218, 318, 418, 513, 609, 629, 649, 669	1-131-353-00	CAP, TANT 10 10% 35V
C514	1-131-381-00	CAP, TANT 47 20% 10V
C519	1-131-427-00	CAP, TANT 220 20% 6.3V
C105, 205, 305, 405, 518, 608, 628, 648, 668	1-131-429-00	CAP, TANT 470 20% 3.15V
C3, 4, 103, 109, 112, 203, 209, 212, 303, 309, 312, 403, 409, 412, 611, 612, 631, 632, 651, 652, 671, 672	1-161-055-00	CAP, CERAMIC 0.022 10% 50V
C11, 12, 13	1-163-168-00	CAP, CHIP CERAMIC 30PF 5% 50V
R516	1-210-828-00	RES, CARBON 4.7M 5% 1/4W
R524	1-215-412-00	RES, METAL 430 1% 1/6W
R329, 332	1-215-418-00	RES, METAL 750 1% 1/6W
R302	1-215-428-00	RES, METAL 2K 1% 1/6W
R101, 201, 301, 401	1-215-440-00	RES, METAL 6.2K 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
R110, 210, 310, 410, 682	1-215-442-00	RES, METAL 7.5K 1% 1/6W
R511	1-215-448-00	RES, METAL 13K 1% 1/6W
R102, 202, 402, 602, 622, 662	1-215-454-00	RES, METAL 24K 1% 1/6W
R127, 128, 227, 228, 327, 328, 427, 428	1-215-462-00	RES, METAL 51K 1% 1/6W
R520	1-215-470-00	RES, METAL 110K 1% 1/6W
R115, 116, 215, 216, 315, 316, 415, 416	1-247-783-00	RES, CARBON 10 5% 1/6W
R605, 625, 645, 665	1-247-793-00	RES, CARBON 27 5% 1/6W
R105, 205, 305, 405, 685	1-247-799-00	RES, CARBON 47 5% 1/6W
R118, 218, 318, 418	1-247-803-00	RES, CARBON 68 5% 1/6W
R106, 120, 121, 206, 220, 221, 306, 320, 321, 406, 420, 421, 509, 517, 688, 689	1-247-807-00	RES, CARBON 100 5% 1/6W
R131, 231, 331, 431	1-247-815-00	RES, CARBON 220 5% 1/6W
R606, 626, 646, 666, 686	1-247-817-00	RES, CARBON 270 5% 1/6W
R601, 621, 661	1-247-827-00	RES, CARBON 680 5% 1/6W
R507, 508, 518, 608, 609, 628, 629, 648, 649, 668, 669, 681	1-247-831-00	RES, CARBON 1K 5% 1/6W
R514, 641	1-247-833-00	RES, CARBON 1.2K 5% 1/6W
R129, 132, 133, 229, 232, 233, 333, 429, 432, 433, 523	1-247-835-00	RES, CARBON 1.5K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
R104, 204, 304, 404, 505	1-247-839-00	RES, CARBON 2.2K 5% 1/6W
R123, 223, 423, 501, 502	1-247-843-00	RES, CARBON 3.3K 5% 1/6W
R113, 117, 119, 213, 217, 219, 313, 317, 319, 413, 417, 419	1-247-847-00	RES, CARBON 4.7K 5% 1/6W
R108, 208, 308, 408	1-247-849-00	RES, CARBON 5.6K 5% 1/6W
R109, 111, 209, 211, 309, 311, 323, 409, 411, 642	1-247-851-00	RES, CARBON 6.8K 5% 1/6W
R324, 510	1-247-857-00	RES, CARBON 12K 5% 1/6W
R511	1-247-858-00	RES, CARBON 13K 5% 1/6W
R503	1-247-859-00	RES, CARBON 15K 5% 1/6W
R103, 203, 303, 403	1-247-861-00	RES, CARBON 18K 5% 1/6W
R107, 112, 122, 125, 207, 212, 222, 225, 307, 312, 322, 325, 407, 412, 422, 425, 512, 513, 519, 525	1-247-863-00	RES, CARBON 22K 5% 1/6W
R124, 224, 424	1-247-867-00	RES, CARBON 33K 5% 1/6W
R526, 701	1-247-871-00	RES, CARBON 47K 5% 1/6W
R126, 130, 226, 230, 326, 330, 426, 430, 522, 703	1-247-879-00	RES, CARBON 100K 5% 1/6W
R114, 214, 314, 414	1-247-887-00	RES, CARBON 220K 5% 1/6W
R521, 702	1-247-893-00	RES, CARBON 390K 5% 1/6W
R604, 624, 664	1-247-897-00	RES, CARBON 560K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
R504, 644, 684	1-247-903-00	RES, CARBON 1M 5% 1/6W
L301	1-408-423-00	INDUCTOR, MICRO, 150 5%
L101, 201, 401	1-408-427-00	INDUCTOR, MICRO, 330 5%
L501, 681	1-408-428-00	INDUCTOR, MICRO, 390 5%
LV101, 201, 301, 401	1-407-301-00	INDUCTOR, VAR, 9mH
L102, 202, 402	1-407-502-00	INDUCTOR, MICRO, 6.8mH 5%
RY501	1-515-477-00	RELAY, 12V
RY101, 201, 301, 401	1-515-518-00	RELAY, 5V
FB1, 2	1-535-178-00	FERRITE BEAD
CN362M ()	1-560-301-00	RECEP, 4P, MALE
CN361M, 365M ()	1-560-302-00	RECEP, 5P, MALE
CN360M ()	1-560-304-00	RECEP, 8P, MALE
CN363M ()	1-560-305-00	RECEP, 10P, MALE
CN364M ()	1-560-306-00	RECEP, 12P, MALE
CN354M, 355M ()	1-560-310-00	RECEP, 4P, MALE
CN353M ()	1-560-311-00	RECEP, 5P, MALE
CN351M ()	1-560-312-00	RECEP, 6P, MALE
CN356M ()	1-560-313-00	RECEP, 8P, MALE
CN357M ()	1-560-314-00	RECEP, 10P, MALE
CN350M, 352M ()	1-560-315-00	RECEP, 12P, MALE
TP101, 102, 103, 201, 202, 203, 301, 302, 303, 401, 402, 403, 501 ()	3-657-703-01	TERMINAL, TP

Ref.No. or Q'ty	Part No.	Description
(AP-12 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
TPE101, 102, 201, 202, 301, 302, 401, 402, 501 () 3-673-805-11		TERMINAL, TP
2pcs	7-686-527-01	SCREW, PSW3x6
D101, 201, 301, 401, 501, 502, 503, 504, 701 8-719-815-55		DIODE 1S1555
D505, 506, 507 8-719-930-33		LED GL3PR3, LED
Q102, 103, 202, 203, 302, 303, 402, 403 8-729-102-35		TRANSISTOR 2SK162
Q101, 105, 106, 201, 205, 206, 301, 305, 306, 401, 405, 406 8-729-307-58		TRANSISTOR 2SC1775A
Q109, 209, 309, 409, 602, 622, 642, 662 8-729-373-92		TRANSISTOR 2SB739
Q108, 208, 308, 408, 501, 601, 621, 641, 661 8-729-378-84		TRANSISTOR 2SD788
Q107, 207, 307, 407 8-729-387-28		TRANSISTOR 2SA872-E
Q104, 204, 304, 404 8-729-679-82		TRANSISTOR 2SA798
IC501, 601, 602, 603, 604, 605 8-759-602-01		IC M5220P
IC101, 201, 301, 401 8-759-745-59		IC NJM4559D
IC502 8-759-990-82		IC TL082CP
Q502 8-761-622-00		TRANSISTOR 2SC1636
Q503, 701 8-769-192-00		TRANSISTOR 2SK43-2

Ref.No. or Q'ty	Part No.	Description
<u>BE-02 BOARD (BVH-2000PS, 2180PS/TTP)</u>		
1pc (for 00/02 model)	() A-6013-045-B	COMPLETE PCB, BE-02
1pc (for 04 model)	() A-6013-053-B	COMPLETE PCB, BE-02
1pc (for 10/12 model)	() A-6013-076-A	COMPLETE PCB, BE-02
1pc (for 14 model)	() A-6013-075-A	COMPLETE PCB, BE-02
(These ass'ies include the following parts.)		

Q16&17, 20&21
X-3673-687-0 TRANSISTOR KIT
This part is the kit of 2SD774-3 and 2SB734-3.
Replace the following two transistors at the same time.
Q16&17 Q20&21
2SD774-3 should be used for Q16 and 20.
2SB734-3 should be used for Q17 and 21.

Q3&4, 103&104, 203&204,
303&304, 403&404
X-3673-694-0 TRANSISTOR KIT
This part is the kit of 2SC2690A-Q and 2SA1220A-Q or 2SC2690A-P and 2SA1220A-P.
Replace the following two transistors at the same time.
Q3&4 Q103&104 Q203&204 Q303&304
Q403&404
2SC2690A-Q or 2SC2690A-P should be used for Q3, 103, 203, 303 and 403.
2SA1220A-Q or 2SA1220A-P should be used for Q4, 104, 204, 304 and 404.

C60	1-102-074-00	CAP, CERAMIC 0.001 10% 50V
C50	1-107-044-00	CAP, MICA 3.3PF +/-0.5PF 500V
C46	1-107-077-51	CAP, MICA 47PF 5% 500V
C3(for 04/14 model), 4(for 04/14 model)	1-107-173-00	CAP, MICA 150PF 5% 500V
C3(for 00/02/10/12 model), 1, 2	1-107-181-00	CAP, MICA 330PF 5% 500V

Ref.No. or Q'ty	Part No.	Description
(BE-02 BOARD,TTP)		
C19,20,21,22,109,110, 111,112,209,210,211, 212,309,310,311,312, 409,410,411,412	1-107-202-00	CAP,MICA 10PF 5% 500V
C101,201,301,401	1-108-563-00	CAP,MYLAR 0.0022 5% 50V
C31	1-108-567-00	CAP,MYLAR 0.0033 5% 50V
C12	1-108-573-00	CAP,MYLAR 0.0056 5% 50V
C14	1-108-575-00	CAP,MYLAR 0.0068 5% 50V
C23,24,113,114,213,214, 313,314,413,414	1-108-579-00	CAP,MYLAR 0.01 5% 50V
C102,202,302,402	1-108-583-00	CAP,MYLAR 0.015 5% 50V
C16,106,206,306,406	1-108-587-00	CAP,MYLAR 0.022 5% 50V
C17,107,207,307,407	1-109-542-00	CAP,MICA 220PF 5% 100V
C5	1-109-576-00	CAP,MICA 620PF 5% 500V
C25	1-109-577-00	CAP,MICA 680PF 5% 500V
C6	1-109-589-00	CAP,MICA 0.0022 5% 500V
C18,47,108,208,308,408	1-109-678-00	CAP,MICA 160PF 1% 500V
C32,33	1-109-689-00	CAP,MICA 470PF 5% 500V
C35,37	1-123-323-00	CAP,ELECT 470 16V
C26,28,39,52,54,115,117, 215,217,315,317,415, 417	1-123-332-00	CAP,ELECT 47 25V
C11,13,48,49,103,104, 203,204,303,304,403, 404	1-123-356-00	CAP,ELECT 10 50V
C15,34,105,205,305,405	1-123-380-00	CAP,ELECT 1 100V

Ref.No. or Q'ty	Part No.	Description
(BE-02 BOARD,TTP)		
C30	1-131-346-00	CAP,TANT 0.68 10% 35V
C45	1-131-347-00	CAP,TANT 1 10% 35V
C10	1-131-350-00	CAP,TANT 3.3 10% 35V
C7,8,9	1-131-353-00	CAP,TANT 10 10% 35V
CV4 (for 04/14 model), 1,2,3,5		
	1-141-155-00	CAP,TRIMMER 600PF
C27,29,36,38,40,41,42, 43,44,51,53,116,118, 216,218,316,318,416, 418	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
R420	1-214-096-00	RES,METAL 33 1% 1/6W
R64,69	1-215-373-00	RES,METAL 10 1% 1/6W
R55,56	1-215-397-00	RES,METAL 100 1% 1/6W
R13,15	1-215-407-00	RES,METAL 270 1% 1/6W
R1,2,34,80,103,203,303, 403	1-215-413-00	RES,METAL 470 1% 1/6W
R4,7,10,14,20,22,25,42, 45,46,106,109,206,209, 306,309,406,409	1-215-421-00	RES,METAL 1K 1% 1/6W
R21,105,205,305,405	1-215-423-00	RES,METAL 1.2K 1% 1/6W
R35,36	1-215-428-00	RES,METAL 2K 1% 1/6W
R5,8,11,23,24,107,108, 207,208,307,308,407, 408	1-215-429-00	RES,METAL 2.2K 1% 1/6W
R49 (for 04/14 model), 50 (for 04/14 model), 44	1-215-433-00	RES,METAL 3.3K 1% 1/6W
R3,6,9,12,32,33,43,60, 61,65,66,101,104,201, 204,301,304,401,404	1-215-437-00	RES,METAL 4.7K 1% 1/6W
R30	1-215-441-00	RES,METAL 6.8K 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(BE-02 BOARD,TTP)		
R48 (for 04/14 model), 29,31,37,38,52,113,213, 313,413	1-215-445-00	RES,METAL 10K 1% 1/6W
R112,212,312,412	1-215-447-00	RES,METAL 12K 1% 1/6W
R47 (for 04/14 model), 17,28,57,58,59	1-215-453-00	RES,METAL 22K 1% 1/6W
R16	1-215-455-00	RES,METAL 27K 1% 1/6W
R53,75	1-215-461-00	RES,METAL 47K 1% 1/6W
R54,76	1-215-463-00	RES,METAL 56K 1% 1/6W
R18	1-215-477-00	RES,METAL 220K 1% 1/6W
R102,202,302,402	1-215-483-00	RES,METAL 390K 1% 1/6W
RV6	1-228-455-00	RES,VAR,CERMET 500
RV8	1-228-461-00	RES,VAR,CERMET 50K
RV11 (for 04/14 model), 10	1-230-834-11	RES,VAR,METAL 10
RV1	1-230-837-11	RES,VAR,METAL 100
RV2,3,4,5	1-230-839-11	RES,VAR,METAL 500
RV9	1-230-844-11	RES,VAR,METAL 20K
R189 (for 04/14 model) (One of the following resistor is used.)		
	1-247-071-00	RES,CARBON 1 5% 1/4W
	1-247-075-00	RES,CARBON 2.2 5% 1/4W
	1-247-077-00	RES,CARBON 3.3 5% 1/4W
	1-247-079-00	RES,CARBON 4.7 5% 1/4W
	1-247-081-00	RES,CARBON 6.8 5% 1/4W
	1-247-083-00	RES,CARBON 10 5% 1/4W
R41,51	1-247-071-00	RES,CARBON 1 5% 1/4W
R189 (for 00/10/02/12 model)		
	1-247-075-00	RES,CARBON 2.2 5% 1/4W

Ref.No. or Q'ty	Part No.	Description
(BE-02 BOARD,TTP)		
R26,27,62,63,67,68,110, 111,210,211,310,311, 410,411	1-247-077-00	RES,CARBON 3.3 5% 1/4W
R39,40	1-247-105-00	RES,CARBON 82 5% 1/4W
LV1	1-407-261-00	INDUCTOR,VAR 100
LV2 (for 04/14 model)		
	1-407-262-00	INDUCTOR,VAR 150
LV3	1-407-284-00	INDUCTOR,VAR 1mH
LV4,5,6,7,8	1-407-297-00	INDUCTOR,VAR 3.5mH
L2	1-407-499-00	INDUCTOR,MICRO,3.9mH 5%
L1 (for 04/14 model)		
	1-408-424-00	INDUCTOR,MICRO,180 5%
T1	1-433-196-00	TRANSFORMER,BIAS
RY1 (for 04/14 model)		
	1-515-196-00	RELAY,12V 250-0HM
X1	1-527-478-00	CRYSTAL,14.31818MHz
CN384M,387M		
	() 1-560-301-00	RECEP,4P,MALE
CN386M () 1-560-302-00		
		RECEP,5P,MALE
CN381M,383M		
	() 1-560-303-00	RECEP,6P,MALE
CN388M () 1-560-304-00		
		RECEP,8P,MALE
CN382M () 1-560-305-00		
		RECEP,10P,MALE
CN385M () 1-560-725-00		
		RECEP,16P,MALE

Ref.No. or Q'ty	Part No.	Description
(BE-02 BOARD,TTP)		
TH101,201,301,401	1-800-198-XX	THERMISTOR,S-1K
TP10 (for 04/14 model)		
1,2,3,4,6,7,8,9,11,12, 13,14,15,16	() 3-657-703-01	TERMINAL,TP
TPE1,2,3,4		
() 3-673-805-11		TERMINAL,TP
D10 (for 04/14 model)		
6,7,8,101,102,103,201, 202,203,301,302,303, 401,402,403	8-719-815-55	DIODE 1S1555
D1,2,3,4,5,9,104,105, 204,205,304,305,404, 405	8-719-911-06	DIODE 1SS106
Q8,9,10	8-729-169-02	TRANSISTOR 2SC2690A
Q12 (for 04/14 model)		
2,6,7,14,18,102,202, 302,402	8-729-602-68	TRANSISTOR 2SA1026-8
Q13 (for 04/14 model)		
1,5,11,15,19,101,201, 301,401	8-729-606-32	TRANSISTOR 2SC2603
IC7	8-759-045-84	IC MC14584BCP,CMOS
IC4,5,6	8-759-900-32	IC SN74LS32N,TTL
IC8	8-759-900-59	IC HI1-201,CMOS
IC1	8-759-903-93	IC SN74LS393N,TTL
IC2	8-759-942-65	IC SN74265N,TTL
IC3	8-759-974-06	IC SN7406N,TTL
IC9,10,11,101,201,301, 401	8-759-990-82	IC TL082CP

Ref.No. or Q'ty	Part No.	Description
BE-03 BOARD (BVH-2000PS-00,02,10,12/2180PS-00,02)		
1pc (for 00/02/10/12 model)		
() A-6013-046-A COMPLETE PCB,BE-03		
(This assembly includes the following parts.)		
C101,201,301	1-108-559-00	CAP,MYLAR 0.0015 5% 50V
C102,202,302	1-108-575-00	CAP,MYLAR 0.0068 5% 50V
C11,12,13,14,15,16	1-108-587-00	CAP,MYLAR 0.022 5% 50V
C20,21,22	1-108-603-00	CAP,MYLAR 0.1 5% 50V
C32,33	1-109-575-00	CAP,MICA 560PF 5% 500V
C34	1-109-577-00	CAP,MICA 680PF 5% 500V
C10,19	1-123-321-00	CAP,ELECT 220 16V
C5	1-123-356-00	CAP,ELECT 10 50V
C28,29,30	1-123-379-00	CAP,ELECT 0.47 100V
C103,203,303	1-123-380-00	CAP,ELECT 1 100V
C6,7,8	1-131-349-00	CAP,TANT 2.2 10% 35V
C24,25,26	1-131-350-00	CAP,TANT 3.3 10% 35V
R102,202,302	1-215-413-00	RES,METAL 470 1% 1/6W
R71,72	1-215-421-00	RES,METAL 1K 1% 1/6W
R107,207,307	1-215-429-00	RES,METAL 2200 1% 1/6W
R104,204,304	1-215-433-00	RES,METAL 3300 1% 1/6W
R106,206,306	1-215-445-00	RES,METAL 10K 1% 1/6W

Ref. No. or Q'ty	Part No.	Description
(BE-03 BOARD, 2000PS-00, 02, 10, 12/2180PS-00, 02, TTP) R103, 203, 303		
	1-215-453-00	RES, METAL 22K 1% 1/6W
R65, 66	1-247-083-00	RES, CARBON 10 5% 1/4W
R67	1-247-103-00	RES, CARBON 68 5% 1/4W
R53, 54, 55, 57, 58, 59	1-247-807-00	RES, CARBON 100 5% 1/6W
R46, 48, 50	1-247-823-00	RES, CARBON 470 5% 1/6W
R61, 62, 63	1-247-830-00	RES, CARBON 910 5% 1/6W
R37, 39, 41	1-247-831-00	RES, CARBON 1K 5% 1/6W
R17, 18, 19, 20, 21, 22	1-247-835-00	RES, CARBON 1.5K 5% 1/6W
	1-247-839-00	RES, CARBON 2.2K 5% 1/6W
R29, 31	1-247-852-00	RES, CARBON 7.5K 5% 1/6W
R25, 26, 27, 33	1-247-855-00	RES, CARBON 10K 5% 1/6W
R45, 47, 49	1-247-856-00	RES, CARBON 11K 5% 1/6W
R13, 14, 15	1-247-861-00	RES, CARBON 18K 5% 1/6W
R101, 201, 301	1-247-893-00	RES, CARBON 390K 5% 1/6W
LV1, 2	1-407-285-00	INDUCTOR, VAR, 1.5mH
LV3	1-407-286-00	INDUCTOR, VAR, 2.2mH
T1, 2, 3	1-433-196-00	TRANSFORMER, BIAS
CN376M ()	1-560-300-00	RECEP, 3P, MALE
CN373M, 374M	() 1-560-302-00	RECEP, 5P, MALE

Ref. No. or Q'ty	Part No.	Description
(BE-03 BOARD, 2000PS-00, 02, 10, 12/2180PS-00, 02, TTP) CN371M, 372M		
	() 1-560-303-00	RECEP, 6P, MALE
CN375M ()	1-560-304-00	RECEP, 8P, MALE
TH1, 2, 3	1-800-200-00	THERMISTOR, S-3K
TP11, 12, 21, 22, 31, 32	() 3-640-328-00	TERMINAL, TP
TPE1	() 3-673-805-11	TERMINAL, TP
D101, 201, 301	8-719-815-55	DIODE 1S1555
Q5, 6, 7, 102, 202, 302	8-729-117-54	TRANSISTOR 2SA1175
Q9, 10, 11, 12, 13, 14	8-729-177-43	TRANSISTOR 2SD774
Q17, 18, 19	8-729-600-27	TRANSISTOR 2SC1364-7
Q101, 201, 301	8-729-606-32	TRANSISTOR 2SC2603
IC1, 2, 3	8-759-990-82	IC TL082CP
----- BE-03 BOARD (BVH-2000PS-04, 14/2180PS-04/TTP) ----- 1pc (for 04, 14 model) () A-6013-054-A COMPLETE PCB, BE-03 (This assembly includes the following parts.)		
C101, 201, 301, 401	1-108-559-00	CAP, MYLAR 0.0015 5% 50V
C102, 202, 302, 402	1-108-575-00	CAP, MYLAR 0.0068 5% 50V
C11, 12, 13, 14, 15, 16, 17, 18	1-108-587-00	CAP, MYLAR 0.022 5% 50V

Ref.No. or Q'ty	Part No.	Description
(BE-03 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
C32, 33, 35	1-109-575-00	CAP, MICA 560PF 5% 500V
C34	1-109-577-00	CAP, MICA 680PF 5% 500V
C10, 19	1-123-321-00	CAP, ELECT 220 16V
C5	1-123-356-00	CAP, ELECT 10 25V
C28, 29, 30, 31	1-123-379-00	CAP, ELECT 0.47 50V
C103, 203, 303, 403	1-123-380-00	CAP, ELECT 1 50V
C20, 21, 22, 23	1-130-495-00	CAP, MYLAR 0.1 5% 50V
C6, 7, 8, 9	1-131-349-00	CAP, TANT 2.2 10% 35V
C24, 25, 26, 27	1-131-350-00	CAP, TANT 3.3 10% 35V
R102, 202, 302, 402	1-215-413-00	RES, METAL 470 1% 1/6W
R71, 72	1-215-421-00	RES, METAL 1K 1% 1/6W
R107, 207, 307, 407	1-215-429-00	RES, METAL 2200 1% 1/6W
R104, 204, 304, 404	1-215-433-00	RES, METAL 3300 1% 1/6W
R106, 206, 306, 406	1-215-445-00	RES, METAL 10K 1% 1/6W
R103, 203, 303, 403	1-215-453-00	RES, METAL 22K 1% 1/6W
C65, 66, 68	1-247-083-00	RES, CARBON 10 5% 1/4W
R67	1-247-103-00	RES, CARBON 68 5% 1/4W
R53, 54, 55, 56, 57, 58, 59, 60	1-247-807-00	RES, CARBON 100 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(BE-03 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
R46, 48, 50, 52	1-247-823-00	RES, CARBON 470 5% 1/6W
R61, 62, 63, 64	1-247-830-00	RES, CARBON 910 5% 1/6W
R37, 39, 41, 43	1-247-831-00	RES, CARBON 1K 5% 1/6W
R17, 18, 19, 20, 21, 22, 23, 24	1-247-835-00	RES, CARBON 1.5K 5% 1/6W
R30, 32, 34, 36, 38, 40, 42, 44	1-247-839-00	RES, CARBON 2.2K 5% 1/6W
R29, 31, 35	1-247-852-00	RES, CARBON 7.5K 5% 1/6W
R25, 26, 27, 28, 33	1-247-855-00	RES, CARBON 10K 5% 1/6W
R45, 47, 49, 51	1-247-856-00	RES, CARBON 11K 5% 1/6W
R13, 14, 15, 16	1-247-861-00	RES, CARBON 18K 5% 1/6W
R101, 201, 301, 401	1-247-893-00	RES, CARBON 390K 5% 1/6W
LV1, 2, 4	1-407-285-00	INDUCTOR, VAR, 1.5mH
LV3	1-407-286-00	INDUCTOR, VAR, 2.2mH
T1, 2, 3, 4	1-433-196-00	TRANSFORMER, BIAS
CN376M ()	1-560-300-00	RECEP, 3P, MALE
CN373M, 374M ()	1-560-302-00	RECEP, 5P, MALE
CN371M, 372M ()	1-560-303-00	RECEP, 6P, MALE

Ref.No. or Q'ty	Part No.	Description
(BE-03 BOARD, 2000PS-04, 14/2180PS-04, TTP)		
CN375M	() 1-560-304-00	RECEP, 8P, MALE
TH1, 2, 3, 4	1-800-200-00	THERMISTOR, S-3K
TP11, 12, 21, 22, 31, 32, 41, 42	3-640-328-00	TERMINAL, TP
TPE1	3-673-805-11	TERMINAL, TP
D101, 201, 301, 401	8-719-815-55	DIODE 1S1555
Q5, 6, 7, 8, 102, 202, 302, 402	8-729-117-54	TRANSISTOR 2SA1175
Q9, 10, 11, 12, 13, 14, 15, 16	8-729-177-43	TRANSISTOR 2SD774
Q17, 18, 19, 20	8-729-600-27	TRANSISTOR 2SC634-7
Q101, 201, 301, 401	8-729-606-32	TRANSISTOR 2SC2603
IC1, 2, 3	8-759-990-82	IC TL082CP

BE-04 BOARD (BVH-2000PS, 2180PS/TTP)

1pc	() 1-606-676-00	PC BOARD, BE-04, WITHOUT COMPONENT
RV4 (for 04/14 model), 1, 2, 3	1-224-945-00	RES, VAR, METAL 200
CN377M	() 1-560-302-00	RECEP, 5P, MALE
1pc (for 00/02/10/12 model)	3-644-002-00	CUSHION, HANDLE
2pcs	7-621-981-15	SCREW, PSW 2.6x6

Ref.No. or Q'ty	Part No.	Description
<u>DR-13 BOARD (BVH-2000PS-02, 04, 12, 14/2180PS-02, 04)</u>		
1pc (for 02/04/12/14 model)		
() A-6049-008-A COMPLETE PCB, DR-13		
(This assembly includes the following parts.)		
C2, 3, 4	1-131-522-00	CAP, TANT 10 20% 25V
C1	1-131-526-00	CAP, TANT 33 20% 10V
R3	1-247-884-00	RES, CARBON 160K 5% 1/6W
R4	1-247-783-00	RES, CARBON 10 5% 1/6W
R2	1-247-831-00	RES, CARBON 1K 5% 1/6W
R1	1-247-838-00	RES, CARBON 2K 5% 1/6W
L1, 2, 3	1-408-096-00	INDUCTOR, MICRO, 470 5%
34pcs	1-560-240-00	CONTACT
2pcs	7-621-259-42	SCREW +P 2.6x6
2pcs	7-682-147-13	SCREW +P 3x6
2pcs	7-684-023-01	NUT, M3
4pcs	7-688-003-13	WASHER, M3, MIDDLE
D2, 3	8-719-109-07	DIODE RD39E-B
D1, 4	8-719-900-95	DIODE V09G
D5, 6, 7, 8	8-719-911-19	DIODE 1SS119
IC2, 3	8-741-115-62	IC BX1156B
IC1	8-759-377-43	IC HA17741GS
Q1	8-769-194-00	TRANSISTOR 2SK43-4

DR-20 BOARD (BVH-2000PS-00, 10/2180PS-00)

1pc (for 00/10 model)	() A-6010-070-A	MOUNTED PCB, DR-20
(This assembly includes the following parts.)		
17pcs	1-560-240-00	CONTACT

Ref.No.
or Q'ty Part No. Description

SL-07 BOARD (BVH-2000PS-02,04,12,14/2180PS-02,04)

1pc (for 02/04/12/14 model)
 () A-6026-023-B MOUNTED PCB,SL-07
 (This assembly includes the following parts.)

7pcs 1-560-240-00 CONTACT

SL-08 BOARD (BVH-2000PS-02,04,12,14/2180PS-02,04)

1pc (for 02/04/12/14 model)
 A-6709-428-B MOUNTED PCB,SL-08

SL-09 BOARD (BVH-2000PS-02,04,12,14/2180PS-02,04)

1pc (for 02/04/12/14 model)
 A-6709-429-C MOUNTED PCB,SL-09
 (This assembly includes the following parts.)

1pc 1-508-937-00 RECP,8P,MALE

Ref.No.
or Q'ty Part No. Description

RP-09 BOARD (BVH-2000PS,2180PS/TTP)

1pc () A-6011-063-A COMPLETE PCB,RP-09
 1pc () A-6011-097-A COMPLETE PCB,RP-09
 (For BVH-2000PS 10,12,14 model)
 (This assembly includes the following parts.)

C6,7,37,38

1-107-158-00 CAP,MICA 30PF 5% 500V

C8,39 1-107-162-00 CAP,MICA 43PF 5% 500V

C5,16,36 1-108-567-00 CAP,MYLAR 0.0033 5% 50V

C49 1-108-595-00 CAP,MYLAR 0.047 5% 50V

C10,41

(One of the following capacitors is used)

1-108-525-00 CAP,MICA 39PF 5% 100V

1-109-528-00 CAP,MICA 51PF 5% 100V

C1,4 1-123-321-00 CAP,ELECT 220 16V

C35,66 1-123-330-00 CAP,ELECT 22 25V

C11,14,17,31,32,42,44,
 47,62,63

1-123-333-00 CAP,ELECT 100 25V

C26,27,57,58

1-123-380-00 CAP,ELECT 1 100V

C9,13,15,18,19,20,21,23,
 24,25,28,29,30,34,40,
 43,46,48,50,51,52,54,
 55,56,59,60,61,65,70

1-161-051-00 CAP,CERAMIC 0.01 10% 50V

C2,3,12,33,45,64

1-161-057-00 CAP,CERAMIC
 0.033 10% 50V

C71 1-161-483-00 CAP,CERAMIC 0.1 10% 50V

R20,68 1-214-101-00 RES,METAL 51 1% 1/4W

R74,84 1-214-112-00 RES,METAL 150 1% 1/4W

RV1,3 1-224-934-00 RES,VAR,METAL 100

RV2,4 1-224-978-00 RES,VAR,METAL 50

R49,97 1-247-196-00 Δ RES,CARBON 15 5% 1/2W

R30,31,78,79

1-247-211-00 Δ RES,CARBON 62 5% 1/2W

Ref.No. or Q'ty	Part No.	Description
(RP-09 BOARD,TTP)		
R19,67	1-247-783-00	RES,CARBON 10 5% 1/6W
R5,6,53,54	1-247-787-00	RES,CARBON 15 5% 1/6W
R11,14,35,38,42,46,47, 61,64,82,85,90,93,95, 115,116	1-247-795-00	RES,CARBON 33 5% 1/6W
R18,50,51,57,98,99	1-247-800-00	RES,CARBON 51 5% 1/6W
R27,28,76,77	1-247-802-00	RES,CARBON 62 5% 1/6W
R22,32,34,37,69,80	1-247-807-00	RES,CARBON 100 5% 1/6W
R29,71	1-247-814-00	RES,CARBON 200 5% 1/6W
R12,13,60,62	1-247-816-00	RES,CARBON 240 5% 1/6W
R41,43,44,45,48,86,89, 91,92,94,96,101	1-247-818-00	RES,CARBON 300 5% 1/6W
R39,87	1-247-820-00	RES,CARBON 360 5% 1/6W
R8,21,26,33,36,55,81,83, 102,110,112	1-247-831-00	RES,CARBON 1K 5% 1/6W
R9,56	1-247-834-00	RES,CARBON 1.3K 5% 1/6W
R23,24,70,73,75	1-247-838-00	RES,CARBON 2K 5% 1/6W
R7,15,25,59,63,	1-247-842-00	RES,CARBON 3K 5% 1/6W
R17,52,65,72,100	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R10,58	1-247-854-00	RES,CARBON 9.1K 5% 1/6W
R1,2,3,4,16,66	1-247-855-00	RES,CARBON 10K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(RP-09 BOARD,TTP)		
L1,2,3,4,6,7,8,9	1-407-169-XX	INDUCTOR,MICRO,100 5%
L5,10	1-407-177-XX	INDUCTOR,MICRO,470 5%
LV1,2	1-408-660-00	INDUCTOR,VAR,1.8
T1,2,3,4	1-427-519-00	TRANSFORMER,OUTPUT
RY1,2	1-515-309-21	RELAY,12V 1K-OHM
FB1,2,3,4,5,6,7,8,9,10	1-535-178-00	FERRITE BEAD
CN263M,265M,267M,269M	() 1-560-300-00	RECEP,3P,MALE
CN262M	() 1-560-301-00	RECEP,4P,MALE
CN261M	() 1-560-302-00	RECEP,5P,MALE
CN264M,266M,268M,270M	1-561-365-00	RECEP,COAXIAL,MALE
TP2,4,5,6,8	() 3-673-772-41	TERMINAL,TP
8pcs	7-686-446-01	SCREW,PS 3x5
D1,2	8-719-815-55	DIODE 1S1555
Q1,2,4,8,9,10,16,20,21, 22	8-729-110-53	TRANSISTOR 2SA1005
Q5,6,11,12,17,18,23,24	8-729-125-20	TRANSISTOR 2SC1252
Q3,15	8-729-177-43	TRANSISTOR 2SD774
IC2,4	8-741-115-62	IC BX1156B
IC1,3	8-743-930-00	IC BX3930
Q7,13,14,19,25,26	8-765-300-00	TRANSISTOR 2SC2009

Ref. No. or Q'ty	Part No.	Description
DD-03 BOARD (BVH-2000PS-02, 04, 12, 14/2180PS-02, 04)		
1pc (for 02/04/12/14 model)		
() A-6023-035-B COMPLETE PCB, DD-03		
(This assembly includes the following parts.)		
C4, 13	1-102-106-00	CAP, CERAMIC 100PF 10% 50V
C9	1-109-676-00	CAP, MICA 130PF 5% 500V
C6, 8, 10, 11	1-123-007-00	CAP, ELECT 4.7 350V
C5, 7	1-123-309-00	CAP, ELECT 330 10V
C1, 2, 12, 14	1-123-330-00	CAP, ELECT 22 25V
C16	1-130-483-00	CAP, MYLAR 0.01 5% 50V
C3, 15	1-161-055-00	CAP, CERAMIC 0.022 10% 50V
R5, 6	1-206-696-00	RES, METAL 22K 5% 2W
R10, 11	1-213-125-00	RES, METAL 33 5% 1W
RV1, 2	1-228-292-00	RES, VAR, CERMET 2K
CP1, 2	1-232-711-11	CIRCUIT BLOCK
CP3	1-232-712-11	CIRCUIT BLOCK
CP4	1-232-713-11	CIRCUIT BLOCK
CP5	1-232-714-11	CIRCUIT BLOCK
CP6	1-232-715-11	CIRCUIT BLOCK
CP7	1-232-716-11	CIRCUIT BLOCK
CP8	1-232-717-11	CIRCUIT BLOCK
CP9	1-232-718-11	CIRCUIT BLOCK
R4, 12	1-247-773-00	RES, CARBON 3.9 5% 1/6W
R7, 9	1-247-839-00	RES, CARBON 2.2K 5% 1/6W
R3, 15	1-247-851-00	RES, CARBON 6.8K 5% 1/6W
R1, 13	1-247-855-00	RES, CARBON 10K 5% 1/6W
R2, 14	1-247-859-00	RES, CARBON 15K 5% 1/6W
R16	1-247-871-00	RES, CARBON 47K 5% 1/6W
R8	1-247-879-00	RES, CARBON 100K 5% 1/6W
CN282M	() 1-560-302-00	RECAP, 5P, MALE
CN281M, 283M		
	() 1-560-304-00	RECEP, 8P, MALE
TP1, 2, 3		
	() 3-673-772-41	TERMINAL, TP

Ref. No. or Q'ty	Part No.	Description
(DD-03 BOARD, TTP)		
8pcs	7-686-528-01	SCREW, PSW 3x8
D1, 2, 5, 6	8-719-110-00	DIODE RD100E
D3, 4, 7, 8	8-719-900-95	DIODE V09G
D9	8-719-911-19	DIODE 1SS119
Q2	8-729-115-64	TRANSISTOR 2SA1156
Q3, 7	8-729-117-54	TRANSISTOR 2SA1175
Q14	8-729-175-22	TRANSISTOR 2SC2752
Q10, 15	8-729-178-54	TRANSISTOR 2SC2785
Q1, 6, 11, 13		
	8-729-204-94	TRANSISTOR 2SC3559
Q18, 19	8-719-900-89	TRANSISTOR DTC144ES
IC3	8-759-245-39	IC TC4539BP, CMOS
IC1, 2	8-759-377-23	IC HA17723G
Q4, 8, 9, 12		
	8-729-141-78	TRANSISTOR 2SC3632-K
Q5, 16, 17	8-729-118-43	TRANSISTOR 2SA1413-L

DA-07 BOARD (BVH-2000PS, 2180PS/TTP)

1pc () A-6015-065-A COMPLETE PCB, DA-07		
(This assembly includes the following parts.)		
C34	1-101-810-00	CAP, CERAMIC 100PF 5% 500V
C33, 36, 37, 38		
	1-102-106-00	CAP, CERAMIC 100PF 10% 50V
C1, 20	1-123-307-00	CAP, ELECT 100 10V
C13, 17	1-123-333-00	CAP, ELECT 100 25V
C29	1-123-356-00	CAP, ELECT 10 50V
C4	1-123-379-00	CAP, ELECT 0.47 100V
C12	1-123-388-00	CAP, ELECT 100 100V

Ref.No. or Q'ty	Part No.	Description
(DA-07 BOARD,TTP)		
C5,35	1-130-483-00	CAP,MYLAR 0.01 5% 50V
C25	1-130-491-00	CAP,MYLAR 0.047 5% 50V
C7	1-130-495-00	CAP,MYLAR 0.1 5% 50V
C11	1-136-169-00	CAP,MYLAR 0.22 5% 50V
C2,6,8,9,10,14,15,16,18, 19,21,22,23,24,26,27, 28,30,31,32	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
R29	1-215-375-31	RES,METAL 12 1% 1/6W
R80	1-215-422-00	RES,METAL 1.1K 1% 1/6W
R24	1-215-436-00	RES,METAL 4.3K 1% 1/6W
R54,55,56,57	1-215-445-00	RES,METAL 10K 1% 1/6W
R82	1-215-455-00	RES,METAL 27K 1% 1/6W
R10	1-215-456-00	RES,METAL 30K 1% 1/6W
R7	1-215-458-00	RES,METAL 36K 1% 1/6W
R8	1-215-459-00	RES,METAL 39K 1% 1/6W
R50	1-217-152-11	RES,METAL 0.33 10% 2W
RB1	1-231-533-00	RES BLOCK,10Kx4
R102	1-247-100-00	RES,CARBON 51 5% 1/4W
R13,15,19	1-247-123-00	RES,CARBON 470 5% 1/4W
R2	1-247-139-00	RES,CARBON 2.2K 5% 1/4W
R3,4,14,18,21	1-247-142-00	RES,CARBON 3K 5% 1/4W
R28	1-247-773-00	RES,CARBON 3.9 5% 1/6W
R73,77	1-247-811-00	RES,CARBON 150 5% 1/6W
R69,70,95,96,98,99	1-247-816-00	RES,CARBON 240 5% 1/6W
R12,17,22	1-247-823-00	RES,CARBON 470 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(DA-07 BOARD,TTP)		
R44,46,49	1-247-824-00	RES,CARBON 510 5% 1/6W
R39	1-247-825-00	RES,CARBON 560 5% 1/6W
R63,64,65	1-247-827-00	RES,CARBON 680 5% 1/6W
R33,34,43,45,47	1-247-829-00	RES,CARBON 820 5% 1/6W
R6,11,16,20,79	1-247-831-00	RES,CARBON 1K 5% 1/6W
R88	1-247-837-00	RES,CARBON 1.8K 5% 1/6W
R1,9	1-247-838-00	RES,CARBON 2K 5% 1/6W
R48,51,87	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R41	1-247-841-00	RES,CARBON 2.7K 5% 1/6W
R66,89	1-247-843-00	RES,CARBON 3.3K 5% 1/6W
R25,53	1-247-846-00	RES,CARBON 4.3K 5% 1/6W
R35,83	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R38	1-247-850-00	RES,CARBON 6.2K 5% 1/6W
R26,27,37,42,59,61,67, 68,74,81,84	1-247-855-00	RES,CARBON 10K 5% 1/6W
R85,86	1-247-857-00	RES,CARBON 12K 5% 1/6W
R32	1-247-859-00	RES,CARBON 15K 5% 1/6W
R72,75	1-247-861-00	RES,CARBON 18K 5% 1/6W
R52	1-247-862-00	RES,CARBON 20K 5% 1/6W
R100	1-247-864-00	RES,CARBON 24K 5% 1/6W
R101	1-247-865-00	RES,CARBON 27K 5% 1/6W
R40,62,92,93	1-247-869-00	RES,CARBON 39K 5% 1/6W
R23	1-247-872-00	RES,CARBON 51K 5% 1/6W
R31	1-247-874-00	RES,CARBON 62K 5% 1/6W
R90	1-247-879-00	RES,CARBON 100K 5% 1/6W
R58	1-247-881-00	RES,CARBON 120K 5% 1/6W
R78	1-247-886-00	RES,CARBON 200K 5% 1/6W
R30	1-247-887-00	RES,CARBON 220K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(DA-07 BOARD,TTP)		
R71,76,97	1-247-895-00	RES,CARBON 470K 5% 1/6W
R91	1-247-896-00	RES,CARBON 510K 5% 1/6W
L1,2,3	1-407-885-00	INDUCTOR,MICRO,0.1mH 5%
L4	1-408-405-00	INDUCTOR,MICRO,4.7 5%
CN115M ()	1-535-173-00	TERMINAL,INSERT
CN117M ()	1-560-178-00	RECEP,6P,MALE
CN112M ()	1-560-302-00	RECEP,5P,MALE
CN116M ()	1-560-723-00	RECEP,3P,MALE
CN114M ()	1-560-724-00	RECEP,10P,MALE
CN111M ()	1-560-726-00	RECEP,20P,MALE
TP4,5,6,7		
()	3-673-805-01	TERMINAL,TP
TPE2,3 ()	3-673-805-11	TERMINAL,TP
4pcs	7-686-449-01	SCREW,PS 3x10
2pcs	7-686-528-01	SCREW,PSW 3x8
D17	8-719-182-07	DIODE RD8,2E
D1	8-719-200-02	DIODE 10E2
D8,9,10,12,13,14,15,16, 18,20	8-719-815-55	DIODE 1S1555
D2,3,4,5,6,7	8-719-911-55	DIODE U05G
D19	8-719-981-01	DIODE ERA81-004
Q16,18,20	8-729-195-23	TRANSISTOR 2SA952
Q6,8,10,11,12	8-729-201-32	TRANSISTOR 2SA1013
Q5,7,9,17,19,21	8-729-238-32	TRANSISTOR 2SC2383
Q1	8-729-318-63	TRANSISTOR 2SA1186
Q2,3,4,13,14,15	8-729-383-73	TRANSISTOR 2SC2837
Q22	8-729-663-47	TRANSISTOR 2SC1364

Ref.No. or Q'ty	Part No.	Description
(DA-07 BOARD,TTP)		
IC8,9,10	8-759-103-93	IC UPC393C
IC7	8-759-135-80	IC UPC358C
IC1,2,3,4	8-759-145-58	IC UPC4558C
IC6	8-759-220-74	IC TC40H074P,CMOS
IC5	8-759-755-17	IC,PROM,MB7051-A1U1

CA-09 BOARD (BVH-2000PS,2180PS/TTP)

1pc () A-6015-064-A COMPLETE PCB,CA-09
(This assembly includes the following parts.)

Q2,3,10,11,18 & 19
X-3673-686-0 TRANSISTOR KIT,2SC1890A
This part is the kit of six transistors.
Replace Q2,3,10,11,18 & 19 at the same time.

C47,50,53	1-102-074-00	CAP,CERAMIC 0.001 10% 50V
C14	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C17,38	1-102-109-00	CAP,CERAMIC 180PF 10% 50V
C48,51,54	1-102-110-00	CAP,CERAMIC 220PF 10% 50V
C5,42	1-108-595-00	CAP,MYLAR 0.047 5% 50V
C18,40,45	1-108-603-00	CAP,MYLAR 0.1 5% 50V

Ref.No. or Q'ty	Part No.	Description
(CA-09 BOARD,TTP)		
C39	1-108-611-00	CAP,MYLAR 0.22 5% 50V
C8,10,30,55	1-123-307-00	CAP,ELECT 100 10V
C22,28	1-123-333-00	CAP,ELECT 100 25V
C1	1-123-356-00	CAP,ELECT 10 50V
C37	1-123-360-00	CAP,ELECT 100 50V
C3	1-123-379-00	CAP,ELECT 0.47 100V
C2,4,6,7,9,11,12,13,15, 16,19,20,21,23,24,25, 26,27,29,31,32,33,34, 35,36,41,43,44,46,49, 52,56	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
R22,23,24	1-214-278-00	RES,METAL 5.6K 0.25% 1/8W
R140,141	1-215-390-00	RES,METAL 51 1% 1/6W
R10	1-215-422-00	RES,METAL 1.1K 1% 1/6W
R17	1-215-432-00	RES,METAL 3K 1% 1/6W
R42,64	1-215-436-00	RES,METAL 4.3K 1% 1/6W
R39,62	1-215-440-00	RES,METAL 6.2K 1% 1/6W
R34,35,36,73,75,76,77	1-215-445-00	RES,METAL 10K 1% 1/6W
R33	1-215-452-00	RES,METAL 20K 1% 1/6W
R18,31	1-215-454-00	RES,METAL 24K 1% 1/6W
R9	1-215-455-00	RES,METAL 27K 1% 1/6W
R27	1-215-462-00	RES,METAL 51K 1% 1/6W
R70,71,72	1-215-243-00	RES,METAL 22K 0.1% 1/6W
R74	1-217-153-00	RES,METAL 0.47 10% 2W
R41,63	1-247-776-00	RES,CARBON 5.1 5% 1/6W
R91,109,127	1-247-783-00	RES,CARBON 10 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(CA-09 BOARD,TTP)		
R97,98,115,116,133,134	1-247-779-00	RES,CARBON 6.8 5% 1/6W
R90,108,126	1-247-804-00	RES,CARBON 75 5% 1/6W
R43,45	1-247-811-00	RES,CARBON 150 5% 1/6W
R93,111,129	1-247-814-00	RES,CARBON 200 5% 1/6W
R96,114,132	1-247-815-00	RES,CARBON 220 5% 1/6W
R50,51,55,56,59,79	1-247-816-00	RES,CARBON 240 5% 1/6W
R38,61	1-247-824-00	RES,CARBON 510 5% 1/6W
R15	1-247-825-00	RES,CARBON 560 5% 1/6W
R89,107,125	1-247-828-00	RES,CARBON 750 5% 1/6W
R67,69	1-247-829-00	RES,CARBON 820 5% 1/6W
R8,48,49,84,85,88,102, 103,106,120,121,124,	1-247-831-00	RES,CARBON 1K 5% 1/6W
R16	1-247-833-00	RES,CARBON 1.2K 5% 1/6W
R92,110,128	1-247-838-00	RES,CARBON 2K 5% 1/6W
R13,138	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R6	1-247-840-00	RES,CARBON 2.4K 5% 1/6W
R94,112,130	1-247-842-00	RES,CARBON 3K 5% 1/6W
R4,20,29	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R26	1-247-850-00	RES,CARBON 6.2K 5% 1/6W
R137	1-247-851-00	RES,CARBON 6.8K 5% 1/6W
R2,3,11,21,32,44,53,58, 65,78,80,81,82,86,99, 100,104,117,118,122, 135,139	1-247-855-00	RES,CARBON 10K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(CA-09 BOARD,TTP)		
R5	1-247-856-00	RES,CARBON 11K 5% 1/6W
R1,7	1-247-857-00	RES,CARBON 12K 5% 1/6W
R136	1-247-859-00	RES,CARBON 15K 5% 1/6W
R46	1-247-861-00	RES,CARBON 18K 5% 1/6W
R28	1-247-862-00	RES,CARBON 20K 5% 1/6W
R25,83,87,101,105,119, 123	1-247-863-00	RES,CARBON 22K 5% 1/6W
R14	1-247-864-00	RES,CARBON 24K 5% 1/6W
R66	1-247-865-00	RES,CARBON 27K 5% 1/6W
R19	1-247-866-00	RES,CARBON 30K 5% 1/6W
R68,95,113,131	1-247-869-00	RES,CARBON 39K 5% 1/6W
R47	1-247-879-00	RES,CARBON 100K 5% 1/6W
R12	1-247-886-00	RES,CARBON 200K 5% 1/6W
R30	1-247-889-00	RES,CARBON 270K 5% 1/6W
R52,57,60	1-247-895-00	RES,CARBON 470K 5% 1/6W
R37,40,54	1-247-903-00	RES,CARBON 1M 5% 1/6W
L1,2,3	1-407-885-00	INDUCTOR,MICRO,0.1mH 5%
CN105M ()	1-535-173-00	TERMINAL,INSERT
CN103M ()	1-560-178-00	RECEP,6P,MALE
CN104M ()	1-560-723-00	RECEP,3P,MALE
CN102M ()	1-560-724-00	RECEP,10P,MALE
CN101M ()	1-560-726-00	RECEP,20P,MALE
TP1,2,3,4,5,6,7 ()	3-673-805-01	TERMINAL,TP
TPE1,2 ()	3-673-805-11	TERMINAL,TP
6pcs	7-686-449-01	SCREW,PS 3x10
2pcs	7-686-528-01	SCREW,PSW 3x8
D4	8-719-182-07	DIODE RD8.2E
D21,22,23,24,25,26	8-719-200-02	DIODE 10E2

Ref.No. or Q'ty	Part No.	Description
(CA-09 BOARD,TTP)		
D2,3,5,6,7,8,9,10,11,12, 13,14,15,16,17,18,19, 20	8-719-815-55	DIODE 1S1555
D1	8-719-981-01	DIODE ERA81-004
Q7,15,23	8-729-106-92	TRANSISTOR 2SC2690A
Q5,13,21	8-729-177-43	TRANSISTOR 2SD774
Q6,14,22	8-729-122-02	TRANSISTOR 2SA1220A
Q9,17,25	8-729-318-63	TRANSISTOR 2SA1186
Q1	8-729-374-02	TRANSISTOR 2SB740
Q8,16,24	8-729-383-73	TRANSISTOR 2SC2837
Q4,12,20	8-729-663-47	TRANSISTOR 2SC1364
IC1,11,12	8-759-103-93	IC UPC393C
IC10	8-759-135-80	IC UPC358C
IC2,3,4,6,15,16	8-759-145-58	IC UPC4558C
IC14	8-759-220-74	IC TC40H074P,CMOS
IC13	8-759-240-49	IC TC4049BP,CMOS
IC5,9	8-759-240-52	IC TC4052BP,CMOS
IC8	8-759-240-81	IC TC4081BP,CMOS
IC7	8-759-745-60	IC NJM4560D

Ref.No. or Q'ty	Part No.	Description
<u>RA-05 BOARD (BVH-2000PS,2180PS/TTP)</u>		
1pc (for BVH-2000PS)		
	() A-6023-031-B	COMPLETE PCB,RA-05
1pc (for BVH-2180PS)		
	() A-6023-034-A	COMPLETE PCB,RA-05
(These ass'ies includes the following parts.)		
C50,52	1-102-074-00	CAP,CERAMIC 0.001 10% 50V
C30,75,86,87,88,89,90, 91	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C4,5,6,8,51,55,56,57	1-108-555-00	CAP,MYLAR 0.001 5% 50V
C16,64	1-108-571-00	CAP,MYLAR 0.0047 5% 50V
C22,58	1-108-583-00	CAP,MYLAR 0.015 5% 50V
C18,60	1-108-595-00	CAP,MYLAR 0.047 5% 50V
C20,61	1-108-603-00	CAP,MYLAR 0.1 5% 50V
C40	1-123-307-00	CAP,ELECT 100 10V
C92,93	1-123-308-00	CAP,ELECT 220 10V
C35,84	1-123-332-00	CAP,ELECT 47 25V
C7,42,46,54	1-123-333-00	CAP,ELECT 100 50V
C12,34,68,77,78	1-123-356-00	CAP,ELECT 10 50V
C13,69	1-123-369-00	CAP,ELECT 4.7 63V
C11,67	1-123-380-00	CAP,ELECT 1 100V
C1,2	1-123-388-00	CAP,ELECT 100 100V
C94	1-131-373-00	CAP,TANT 22 10% 16V
C3,9,14,15,17,19,21,23, 25,27,28,29,31,33,36, 37,38,39,41,43,44,45, 47,48,49,62,63,65,66, 70,71,72,73,76,80,81, 82,83	1-161-055-00	CAP,CERAMIC 0.022 10% 50V

Ref.No. or Q'ty	Part No.	Description
(RA-05 BOARD,TTP)		
R34,35,69,70,190,191, 224,225	1-215-377-00	RES,METAL 15 1% 1/6W
R53,54,56,231,232,233	1-215-385-00	RES,METAL 33 1% 1/6W
R139,145,299,304	1-215-405-00	RES,METAL 220 1% 1/6W
R143,149,298,308	1-215-414-00	RES,METAL 510 1% 1/6W
R290	1-215-422-00	RES,METAL 1.1K 1% 1/6W
R36,37,39,40,41,42,196, 197,198,199,201,202	1-215-428-00	RES,METAL 2K 1% 1/6W
R52,236	1-215-433-00	RES,METAL 3.3K 1% 1/6W
R126,254	1-215-435-00	RES,METAL 3.9K 1% 1/6W
R18,19,20,183,184,185	1-215-437-00	RES,METAL 4.7K 1% 1/6W
R140,141,144,146,300, 301,303,305	1-215-440-00	RES,METAL 6.2K 1% 1/6W
R13,14,15,180,181,182	1-215-443-00	RES,METAL 8.2K 1% 1/6W
R58,74,105,109,114,120, 125,152,155,230,245, 258,260,263,266,267, 296,297	1-215-445-00	RES,METAL 10K 1% 1/6W
R77,115,228,256	1-215-447-00	RES,METAL 12K 1% 1/6W
R76,229	1-215-449-00	RES,METAL 15K 1% 1/6W
R117,259	1-215-451-00	RES,METAL 18K 1% 1/6W
R16,17,22,163,164,166	1-215-453-00	RES,METAL 22K 1% 1/6W
R293	1-215-455-00	RES,METAL 27K 1% 1/6W
R116,255	1-215-459-00	RES,METAL 39K 1% 1/6W

Ref.No. or Q'ty	Part No.	Description
(RA-05 BOARD,TTP) (for BVH-2000PS)		
R79,215	1-215-464-00	RES,METAL 62K 1% 1/6W
R21,113,142,147,165,302, 306,311	1-215-469-00	RES,METAL 100K 1% 1/6W
R23,167	1-217-152-11	RES,METAL 0.33 10% 2W
RV1,6	1-230-842-11	RES,VAR,METAL 5K
RV2,5	1-230-845-11	RES,VAR,METAL 50K
R24,25,26,168,178,179	1-247-121-00	RES,CARBON 390 5% 1/4W
R320,334	1-247-131-00	RES,CARBON 1K 5% 1/4W
R1,2,3,10,11,12,157,158, 159,172,173,174	1-247-139-00	RES,CARBON 2.2K 5% 1/4W
R55	1-247-425-11	RES,CARBON 47K 5% 1/6W
R4,5,6,160,161,162	1-247-771-00	RES,CARBON 3.3 5% 1/6W
R148,150,307,309	1-247-800-00	RES,CARBON 51 5% 1/6W
R135,138	1-247-805-00	RES,CARBON 82 5% 1/6W
R66,93,95,96,98,100,275, 276,277,280,281,282	1-247-816-00	RES,CARBON 240 5% 1/6W
R27,28,29,30,31,32,175, 176,177,188,189,192	1-247-819-00	RES,CARBON 330 5% 1/6W
R61,242	1-247-824-00	RES,CARBON 510 5% 1/6W
R71,133,223,252,283,289	1-247-831-00	RES,CARBON 1K 5% 1/6W
R50,186	1-247-834-00	RES,CARBON 1.3K 5% 1/6W
R119,262	1-247-837-00	RES,CARBON 1.8K 5% 1/6W
R51,112,235,270	1-247-838-00	RES,CARBON 2K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(RA-05 BOARD,TTP)		
R7,8,9,68,121,169,170, 171,226,234,264,325, 330	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R33,187	1-247-843-00	RES,CARBON 3.3K 5% 1/6W
R123,285	1-247-844-00	RES,CARBON 3.6K 5% 1/6W
R72,219,327	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R55	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R90,108,154,214,294,313, 314	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R118,261	1-247-849-00	RES,CARBON 5.6K 5% 1/6W
R80,128,216,247	1-247-850-00	RES,CARBON 6.2K 5% 1/6W
R64,246	1-247-851-00	RES,CARBON 6.8K 5% 1/6W
R130,248,329,337,338	1-247-853-00	RES,CARBON 8.2K 5% 1/6W
R38,43,44,46,47,48,49, 92,101,102,103,104,106, 110,122,136,151,153, 156,194,200,203,204, 221,222,253,265,268, 272,273,291,292,295, 316,317	1-247-855-00	RES,CARBON 10K 5% 1/6W
R75,89,211,220,284,287	1-247-857-00	RES,CARBON 12K 5% 1/6W
R86,206	1-247-858-00	RES,CARBON 13K 5% 1/6W
R57,238,321,335	1-247-859-00	RES,CARBON 15K 5% 1/6W
R134,137	1-247-861-00	RES,CARBON 18K 5% 1/6W
R315,318	1-247-862-00	RES,CARBON 20K 5% 1/6W
R82,85,124,207,217,257	1-247-863-00	RES,CARBON 22K 5% 1/6W
R78,213	1-247-864-00	RES,CARBON 24K 5% 1/6W
R127,212	1-247-870-00	RES,CARBON 43K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(RA-05 BOARD,TTP)		
R45,83,111,195,269,319, 324,326,331,339	1-247-872-00	RES,CARBON 51K 5% 1/6W
R65,243	1-247-874-00	RES,CARBON 62K 5% 1/6W
R107,271	1-247-875-00	RES,CARBON 68K 5% 1/6W
R60,239	1-247-876-00	RES,CARBON 75K 5% 1/6W
R131,250	1-247-878-00	RES,CARBON 91K 5% 1/6W
R63,193,240,310,322,323, 332,333	1-247-879-00	RES,CARBON 100K 5% 1/6W
R59,237	1-247-882-00	RES,CARBON 130K 5% 1/6W
R62,241	1-247-883-00	RES,CARBON 150K 5% 1/6W
R210,312	1-247-885-00	RES,CARBON 180K 5% 1/6W
R67,87,88,91,205,208, 209,244,286,288	1-247-886-00	RES,CARBON 200K 5% 1/6W
R73,227	1-247-893-00	RES,CARBON 390K 5% 1/6W
R94,97,99,132,251,274, 278,279,328,336	1-247-895-00	RES,CARBON 470K 5% 1/6W
(for BVH-2180PS)		
R79,215	1-247-859-00	RES,CARBON 470K 5% 1/6W
R129,249	1-247-902-00	RES,CARBON 910K 5% 1/6W
R81,218	1-247-903-00	RES,CARBON 1M 5% 1/6W
L2,3	1-407-885-00	INDUCTOR,MICRO,0.1mH 5%
L1	1-409-339-00	COIL,SN
CN201M ()	1-535-173-00	TERMINAL,INSERT
CN207M,208M,209M ()	1-560-178-00	RECEP,6P,MALE
CN202M,204M ()	1-560-303-00	RECEP,6P,MALE
CN205M,206M ()	1-560-724-00	RECEP,10P,MALE
CN203M ()	1-560-729-00	RECEP,34P,MALE
S1	1-570-258-12	SWITCH,THERMAL REED 90°C

Ref.No. or Q'ty	Part No.	Description
(RA-05 BOARD,TTP)		
1pc	() 1-609-900-11	PC BOARD,SW-14 WITHOUT COMPONENT
3pcs	3-534-816-00	SUPPORT
TP1,2,3,4,5,7,8,9,10,13, 14,15,16,17,19,20,21, 22,25,26	() 3-673-772-21	TERMINAL,TP
TP23,24	() 3-673-805-01	TERMINAL,TP
TPE1,2	() 3-673-805-11	TERMINAL,TP
2pcs	4-866-397-00	CUSHION,LED
4pcs	7-621-981-25	SCREW,PSW 2.6x8
6pcs	7-623-208-22	SPRING WASHER,M2
6pcs	7-682-657-01	SCREW,+PS 3x40
6pcs	7-684-023-04	NUT,M3
4pcs	7-686-447-01	SCREW,PS 3x6
1pc	7-686-448-01	SCREW,PS 3x8
4pcs	7-686-527-01	SCREW,PSW 3x6
D25,26,54,55	8-719-151-07	DIODE RD5.1E-B
D13,14,15,41,42,43	8-719-175-07	DIODE RD7.5E
D7,8,9,38,39,40	8-719-200-02	DIODE 10E2
D10,11,12,16,17,18,21, 22,23,24,27,34,35,36, 37,44,45,46,49,50,51, 52,53,56,58,59,60,61, 62,63	8-719-815-55	DIODE 1S1555
D20,47	8-719-911-06	DIODE 1SS106
D1,2,3,4,5,6,28,29,30, 31,32,33	8-719-911-55	DIODE U05G
D57	8-719-981-01	DIODE ERA81-004
Q47,54	8-729-115-64	TRANSISTOR 2SA1156
Q22,45	8-729-117-54	TRANSISTOR 2SA1175
Q19,44	8-729-177-43	TRANSISTOR 2SD774

Ref.No. or Q'ty	Part No.	Description
(RA-05 BOARD,TTP)		
Q13,14,15,36,37,38	8-729-195-23	TRANSISTOR 2SA952
Q4,5,6,27,28,29	8-729-201-32	TRANSISTOR 2SA1013
Q7,8,9,30,31,32	8-729-238-32	TRANSISTOR 2SC2383
Q48,53	8-729-255-12	TRANSISTOR 2SC2551
Q10,11,12,33,34,35	8-729-377-32	TRANSISTOR 2SC2773-0
Q1,2,3,24,25,26	8-729-383-73	TRANSISTOR 2SC2837
Q16,17,18,20,21,23,39, 40,41,42,43,46,49,50, 51,52,55,56	8-729-606-32	TRANSISTOR 2SC2603
IC5	8-759-045-38	IC MC14538BCP,CMOS
IC9,10,13,23,26,27,28	8-759-103-93	IC UPC393C
IC14	8-759-135-80	IC UPC358C
IC6,7,11,12,15,16,21,22, 24,25,29,30	8-759-145-58	IC UPC4558C
IC4	8-759-240-13	IC TC4013BP,CMOS
IC2,18,19	8-759-240-30	IC TC4030BP,CMOS
IC1,17	8-759-755-17	IC,PROM,MB7051-A1U1
IC3	8-759-900-32	IC SN74LS32N,TTL
IC8,20	8-759-990-82	IC TL082CP

Ref.No. or Q'ty	Part No.	Description
TT-01 BOARD (BVH-2000PS,2180PS/TTP)		
1pc (for BVH-2000PS)	() A-6025-084-A	COMPLETE PCB,TT-01
1pc (for BVH-2180PS)	() A-6025-091-A	COMPLETE PCB,TT-01
(These ass'ies includes the following parts.)		
C20	1-102-106-00	CAP,CERAMIC 100PF 10% 50V
C18	1-108-587-00	CAP,MYLAR 0.022 5% 50V
C17	1-108-595-00	CAP,MYLAR 0.047 5% 50V
C4	1-123-307-00	CAP,ELECT 100 10V
C21,22	1-123-330-00	CAP,ELECT 22 25V
C16	1-123-332-00	CAP,ELECT 47 25V
C5,8,11,12	1-123-333-00	CAP,ELECT 100 25V
C9	1-123-356-00	CAP,ELECT 10 50V
C1,2,3,6,7,10,13,14,15, 19,23	1-161-055-00	CAP,CERAMIC 0.022 10% 50V
R15	1-212-370-00	RES,METAL 6.8 5% 1W
R40,41	1-214-116-00	RES,METAL 220 1% 1/4W
R26,37	1-214-125-00	RES,METAL 510 1% 1/4W
R12,13,35	1-214-132-00	RES,METAL 1K 1% 1/4W
R31	1-214-141-00	RES,METAL 2.4K 1% 1/4W
R27,28,38,39	1-214-151-00	RES,METAL 6.2K 1% 1/4W
(for BVH-2180PS)		
R34,36	1-214-159-00	RES,METAL 13K 1% 1/4W
(for BVH-2000PS)		
R34,36	1-214-170-00	RES,METAL 39K 1% 1/4W

Ref.No. or Q'ty	Part No.	Description
(TT-01 BOARD,TTP)		
R30,32	1-214-170-00	RES,METAL 39K 1% 1/4W
R23,25	1-214-180-00	RES,METAL 100K 1% 1/4W
R29,33	1-214-350-00	RES,METAL 5.6K 0.1% 1/8W
RV2	1-228-305-00	RES,VAR,CERMET 1K
RV1	1-228-307-00	RES,VAR,CERMET 5K
RB1	1-231-410-00	RES BLOCK,10Kx8
R18,19,20,21,22,24	1-247-800-00	RES,CARBON 51 5% 1/6W
R7	1-247-817-00	RES,CARBON 270 5% 1/6W
R46	1-247-818-00	RES,CARBON 300 5% 1/6W
R59	1-247-825-00	RES,CARBON 560 5% 1/6W
R53	1-247-827-00	RES,CARBON 680 5% 1/6W
R55	1-247-828-00	RES,CARBON 750 5% 1/6W
R11,49,56	1-247-831-00	RES,CARBON 1K 5% 1/6W
R60,61	1-247-833-00	RES,CARBON 1.2K 5% 1/6W
R16,17	1-247-834-00	RES,CARBON 1.3K 5% 1/6W
R2,6,10	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R5,54	1-247-842-00	RES,CARBON 3K 5% 1/6W
R14	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R4,9	1-247-853-00	RES,CARBON 8.2K 5% 1/6W
R1,3,8,48,50,57,58	1-247-855-00	RES,CARBON 10K 5% 1/6W
R44,47	1-247-859-00	RES,CARBON 15K 5% 1/6W
R51,52	1-247-863-00	RES,CARBON 22K 5% 1/6W
R42	1-247-883-00	RES,CARBON 150K 5% 1/6W
R45	1-247-896-00	RES,CARBON 510K 5% 1/6W
R43	1-247-901-00	RES,CARBON 820K 5% 1/6W
L2	1-408-421-00	INDUCTOR,MICRO,100 5%
L1,3	1-409-339-00	COIL,SN
CN007M	() 1-560-299-00	RECEP,2P,MALE
CN001M,008M,009M	() 1-560-300-00	RECEP,3P,MALE
CN005M,006M	() 1-560-301-00	RECEP,4P,MALE
CN003M,004M	() 1-560-302-00	RECEP,5P,MALE

Ref.No. or Q'ty	Part No.	Description
(TT-01 BOARD,TTP)		
CN002M	() 1-560-305-00	RECEP,10P,MALE
CN010M	() 1-560-729-00	RECEP,34P,MALE
TP1	() 3-673-805-01	TERMINAL,TP
TPE2	() 3-673-805-11	TERMINAL,TP
4pcs	4-866-397-00	CUSHION,LED
D4,5	8-719-100-28	DIODE RD4.7E-B3
D6,7	8-719-151-07	DIODE RD5.1E-B
D2,3,9,10,11,12,13,14,15,16	8-719-200-02	DIODE 10E2
D1,8	8-719-815-55	DIODE 1S1555
Q1	8-729-117-54	TRANSISTOR 2SA1175
Q10,17,18	8-729-177-43	TRANSISTOR 2SD774
Q6	8-729-373-92	TRANSISTOR 2SB739
Q5	8-729-378-84	TRANSISTOR 2SD788
Q15,16	8-729-398-63	TRANSISTOR 2SC1986-Y
Q2,3,4,7,8,9,11,12,13,14	8-729-606-32	TRANSISTOR 2SC2603
IC6	8-759-045-84	IC MC14584BCP,CMOS
IC1,4	8-759-145-58	IC UPC4558C
IC5	8-759-240-30	IC TC4030BP,CMOS
IC2,3	8-759-700-10	IC NJM4558DMD
IC7	8-759-900-05	IC SN74LS05N,TTL

Ref. No.
or Q'ty Part No. Description

RS-17 BOARD (BVH-2180PS/TTP)

1pc () A-6025-093-A COMPLETE PCB, RS-17
(This assembly includes the following parts.)

C6 1-108-579-00 CAP, MYLAR 0.01 5% 50V
C1 1-124-142-00 CAP, ELECT 470 10V

C2, 3, 4, 5, 7, 8, 9, 10, 11
1-161-055-00 CAP, CERAMIC 0.022 10% 50V

R10, 11 1-247-800-00 RES, CARBON 51 5% 1/6W
R8, 12 1-247-819-00 RES, CARBON 330 5% 1/6W

R6, 7 1-247-821-00 RES, CARBON 390 5% 1/6W
R1, 9 1-247-831-00 RES, CARBON 1.0K 5% 1/6W
R2, 3, 4 1-247-855-00 RES, CARBON 10K 5% 1/6W
R5 1-247-887-00 RES, CARBON 220K 5% 1/6W
L1 1-409-339-00 COIL, SN

CN042M () 1-560-302-00 RECEP, 5P, MALE
CN041M () 1-560-306-00 RECEP, 12P, MALE
D1, 2 8-719-930-33 LED, GL-3PR3, RED
IC4 8-759-001-00 IC MC74HC132N, CMOS
IC2, 3 8-759-202-83 IC TC74HC107P, CMOS

IC5 8-759-207-73 IC TC4030BPHB
IC6 8-759-240-22 IC TC4022BP, CMOS
IC1, 7 8-759-954-54 IC SN75454BP, TTL

Ref. No.
or Q'ty Part No. Description

TM-16 BOARD (BVH-2000PS, 2180PS/TTP)

1pc () 1-609-959-12 PC BOARD, TM-16,
WITHOUT COMPONENT

C1 1-161-055-00 CAP, CERAMIC
0.022 10% 50V

R1 1-215-423-00 RES, METAL 1.2K 1% 1/6W
R4 1-215-427-00 RES, METAL 1.8K 1% 1/6W
R3 1-215-464-00 RES, METAL 62K 1% 1/6W

R2 1-215-467-00 RES, METAL 82K 1% 1/6W
R5 1-215-487-00 RES, METAL 560K 1% 1/6W
4pcs 1-517-072-00 HOLDER, LAMP
TM2, 3 1-548-119-00 HOURS METER
S1 1-553-441-21 SWITCH, TOGGLE

CN022M () 1-560-310-00 RECEP, 4P, MALE
TP1, 2 () 3-673-805-01 TERMINAL, TP
TPE () 3-673-805-11 TERMINAL, TP
2pcs 7-621-981-15 SCREW, PSW 2.6x6

RS-18 BOARD (BVH-2180PS/TTP)

1pc () 1-613-389-11 PC BOARD, RS-18
WITHOUT COMPONENT

CN041F () 1-561-056-00 PLUG, HOUSING, 12P
 () 1-560-298-00 CONTACT, FEMALE

1pc () 3-701-822-00 HOLDER, WIRE
4pcs 7-686-447-01 SCREW, PS3x6
1pc 7-686-527-01 SCREW, PSW3x6
D1, 2 8-719-919-39 DIODE GP-2L01F

HM-05, MOTOR, TD-05, TH-03

Ref.No.
or Q'ty Part No. Description

HM-05 BOARD (BVH-2000PS,2180PS/TTP)

1pc	() 1-606-699-00	PC BOARD,HM-05, WITHOUT COMPONENT
R2	1-214-165-00	RES,METAL 24K 1% 1/4W
R1	1-214-170-00	RES,METAL 39K 1% 1/4W
R3	1-214-788-00	RES,METAL 300K 1% 1/4W
2pcs	1-517-072-00	HOLDER,LAMP
TM1	1-548-119-00	HOURS METER
CN021M	() 1-560-310-00	RECEP,4P,MALE
TP1	() 3-673-805-01	TERMINAL,TP
TPE	() 3-673-805-11	TERMINAL,TP
2pcs	7-621-981-15	SCREW,PSW 2.6x6

MOTOR BOARD (BVH-2000PS,2180PS/TTP)

1pc	() 1-602-615-11	PC BOARD,MOTOR, WITHOUT COMPONENT
C301,302	1-108-577-00	CAP,MYLAR 0.0082 5% 50V
R305,306,312,313	1-214-108-00	RES,METAL 100 1% 1/4W
R301	1-214-116-00	RES,METAL 220 1% 1/4W
R316	1-214-124-00	RES,METAL 470 1% 1/4W
R302,303,304,309,310, 311	1-214-132-00	RES,METAL 1K 1% 1/4W
R307,314	1-214-174-00	RES,METAL 56K 1% 1/4W
R308,315	1-214-180-00	RES,METAL 100K 1% 1/4W
RT301	1-224-490-00	RES,VAR,METAL 4.7K
RT302	1-224-660-00	RES,VAR,METAL 1K
TP-01,02,G	() 1-536-354-00	TERMINAL,TP

Ref.No.
or Q'ty Part No. Description

(MOTOR BOARD,TTP)

CN024M	() 1-560-301-00	RECEP,4P,MALE
H301,302	8-719-800-17	DIODE THS102A
D301	8-719-110-03	DIODE RD7.5ESB2
Q301,303	8-729-141-42	TRANSISTOR 2SD414-R
Q302,304	8-729-154-82	TRANSISTOR 2SB548-R
IC301	8-759-700-58	IC NJM4558DFA

TD-05 BOARD (BVH-2000PS,2180PS/TTP)

1pc	() 1-606-702-00	PC BOARD,TD-05, WITHOUT COMPONENT
CN006F	() 1-509-985-00	PLUG,HOUSING,4P
	() 1-560-298-00	CONTACT,FEMALE
1pc	7-621-972-25	SCREW,PS 2.6x6
1pc	7-621-972-35	SCREW,PS 2.6x8
PH1	8-719-411-02	PHOTO INTERRUPTER, ON1102S.S0

TH-03 BOARD (BVH-2000PS,2180PS/TTP)

1pc	() 1-606-701-00	PC BOARD,TH-03, WITHOUT COMPONENT
S1,2	1-553-117-41	SWITCH,REED
CN023M	() 1-560-311-00	RECEP,5P,MALE

Ref.No. or Q'ty	Part No.	Description
<u>TR-07 BOARD (BVH-2000PS,2180PS/TTP)</u>		
1pc	() 1-606-698-00	PC BOARD,TR-07, WITHOUT COMPONENT
CN005F	() 1-509-985-00 () 1-560-298-00	PLUG,HOUSING,4P CONTACT,FEMALE
2pcs	7-687-603-14	SCREW,BTP 2.6x6
DME1	8-745-211-00 () 3-673-694-00	DME DM211 HOLDER,DME

<u>HD-06 BOARD (BVH-2000PS,2180PS/TTP)</u>		
1pc	() 1-606-679-00	PC BOARD,HD-06, WITHOUT COMPONENT

<u>CEH-2 BOARD (BVH-2000PS,2180PS/TTP)</u>		
1pc	() 1-588-946-00	PC BOARD,CEH-2, WITHOUT COMPONENT

Ref.No. or Q'ty	Part No.	Description
<u>HD-07 BOARD (BVH-2000PS-00,02,10,12/2180PS-00,02/TTP)</u>		
2pcs (for 02/12 model)		
1pc (for 00/10 model)	() 1-606-680-00	PC BOARD,HD-07, WITHOUT COMPONENT

<u>HD-08 BOARD (BVH-2000PS-04/14,2180PS-04/TTP)</u>		
2pcs (for 04/14 model)		
	() 1-606-681-00	PC BOARD,HD-08 WITHOUT COMPONENT

<u>VR-05 BOARD (BVH-2000PS-00,02,10,12/2180PS-00,02)</u>		
1pc (for 00/02/10/12 model)		
	() A-6013-042-A	COMPLETE PCB,VR-05 (This assembly includes the following parts.)
C1,3	1-123-333-00	CAP,ELECT 100 25V
C6,7,9,10,12,13	1-131-341-00	CAP,TANT 0.1 10% 35V
C11,14	1-131-359-00	CAP,TANT 10 10% 25V
C5,8	1-131-373-00	CAP,TANT 22 10% 16V
C2,4	1-161-055-00	CAP,CERAMIC 0.022 10% 50V

Ref.No. or Q'ty	Part No.	Description
(VR-05 BOARD, LEVEL CONT PNL)		
R1,2	1-206-473-00	RES, METAL 27 5% 2W
RV3,5,7,9,11,13	1-224-919-00	RES, VAR, METAL 5K
RV15	1-224-920-00	RES, VAR, METAL 10K
RV4,6,8,10,12,14	1-228-548-00	RES WITH SW, VAR, CARBON 10K(A)
RV16,17	1-228-549-00	RES WITH SW, VAR, CARBON 10K(B)
RV1	1-228-550-00	RES, VAR, CARBON 10K(A)x2
RV2	1-228-551-00	RES WITH SW, VAR, CARBON 2K(A)x2
R12,13,16,19,20,23,27, 28,30,31	1-247-807-00	RES, CARBON 100 5% 1/6W
R8,10	1-247-813-00	RES, CARBON 180 5% 1/6W
R7,9	1-247-828-00	RES, CARBON 750 5% 1/6W
R3,4,5,6	1-247-836-00	RES, CARBON 1.6K 5% 1/6W
R33,35,36,38,39,41	1-247-843-00	RES, CARBON 3.3K 5% 1/6W
R17,24,32	1-247-850-00	RES, CARBON 6.2K 5% 1/6W
R14,15,21,22	1-247-855-00	RES, CARBON 10K 5% 1/6W
R11,18,25	1-247-862-00	RES, CARBON 20K 5% 1/6W
R34,37,40	1-247-869-00	RES, CARBON 39K 5% 1/6W
R26,29	1-247-879-00	RES, CARBON 100K 5% 1/6W
J1	1-507-552-21	JACK, PHONE
CN802M,803M	() 1-560-301-00	RECEP, 4P, MALE

Ref.No. or Q'ty	Part No.	Description
(VR-05 BOARD, LEVEL CONT PNL)		
CN805M,808M	() 1-560-302-00	RECEP, 5P, MALE
CN800M,801M,812M	() 1-560-303-00	RECEP, 6P, MALE
CN811M	() 1-560-304-00	RECEP, 8P, MALE
CN804M,806M,810M	() 1-560-305-00	RECEP, 10P, MALE
CN807M,809M	() 1-560-306-00	RECEP, 12P, MALE
IC1,2,3	8-759-745-59	IC NJM4559D
<u>VR-07 BOARD (BVH-2000PS-04/14,2180PS-04)</u>		
1pc (for 04/14 model)		
() A-6013-056-A COMPLETE PCB, VR-07 (This assembly includes the following parts.)		
C1,3	1-123-333-00	CAP, ELECT 100 25V
C5,6,8,9,12,13,16,17	1-131-341-00	CAP, TANT 0.1 10% 35V
C7,10,11,14,15,18	1-131-359-00	CAP, TANT 10 10% 25V
C2,4	1-161-055-00	CAP, CERAMIC 0.022 10% 50V
R1,2	1-206-473-00	RES, METAL 27 5% 2W
RV2,4,6,8,10,12,14,16	1-224-919-00	RES, VAR, METAL 5K

Ref.No. or Q'ty	Part No.	Description
(VR-07 BOARD, LEVEL CONT PNL)		
RV18	1-224-920-00	RES, VAR, METAL 10K
RV3, 5, 7, 9, 11, 13, 15, 17	1-228-548-00	RES WITH SW, VAR, CARBON 10K(A)
RV19, 20	1-228-549-00	RES WITH SW, VAR, CARBON 10K(B)
RV1	1-228-550-00	RES, VAR, CARBON 10K(A)x2
R6, 7, 9, 11, 16, 17, 19, 21, 27, 28, 30, 32, 38, 39, 41, 43	1-247-807-00	RES, CARBON 100 5% 1/6W
R5, 10, 15, 20, 25, 31, 36, 42	1-247-843-00	RES, CARBON 3.3K 5% 1/6W
R12, 22, 33, 44	1-247-850-00	RES, CARBON 6.2K 5% 1/6W
R3, 13, 23, 34	1-247-862-00	RES, CARBON 20K 5% 1/6W
R4, 14, 24, 35	1-247-869-00	RES, CARBON 39K 5% 1/6W
R8, 18, 26, 29, 37, 40	1-247-879-00	RES, CARBON 100K 5% 1/6W
J1	1-507-552-21	JACK, PHONE
CN802M, 803M	() 1-560-301-00	RECEP, 4P, MALE
CN805M, 808M	() 1-560-302-00	RECEP, 5P, MALE
CN800M, 801M, 812M	() 1-560-303-00	RECEP, 6P, MALE
CN811M	() 1-560-304-00	RECEP, 8P, MALE
CN804M, 806M, 810M	() 1-560-305-00	RECEP, 10P, MALE

Ref.No. or Q'ty	Part No.	Description
(VR-07 BOARD, LEVEL CONT PNL)		
CN807M, 809M	() 1-560-306-00	RECEP, 12P, MALE
IC1, 2, 3, 4	8-759-745-59	IC NJM4559D

ML-02 BOARD (BVH-2000PS-00, 02, 10, 12/2180PS-00, 02)

1pc (for 00/02/10/12 model)

() 1-606-711-00	PC BOARD, ML-02, WITHOUT COMPONENT	
R1,2,3,4	1-247-121-00	RES,CARBON 390 5% 1/4W
R5	1-247-233-00	RES,CARBON 510 5% 1/2W
CN811F	() 1-509-988-00	PLUG,HOUSING,8P
	() 1-560-298-00	CONTACT,FEMALE
SW1	1-516-994-00	SWITCH,SLIDE
6pcs	4-866-397-00	CUSHION,LED
D33,34,35	8-719-952-51	LED,AA5525S,ORG
D1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17, 18,19,20,21,22,23,24, 25,26,27,28,29,30,31, 32	8-719-955-25	LED,PY5525S,YEL

Ref.No. or Q'ty	Part No.	Description
ML-03 BOARD (BVH-2000PS-04/14,2180PS-04)		
1pc (for 04/14 model)	() 1-606-712-00	PC BOARD,ML-03 WITHOUT COMPONENT

R1,2,3,4,5	1-247-121-00	RES,CARBON 390 5% 1/4W
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R6	1-247-233-00	RES,CARBON 510 5% 1/2W
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CN811F	() 1-509-988-00	PLUG,HOUSING,8P
	() 1-560-298-00	CONTACT,FEMALE

SW1	1-516-994-00	SWITCH,SLIDE
6pcs	4-866-397-00	CUSHION,LED

D41,42,43	8-719-952-51	LED,AA5525S,ORG
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D1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17, 18,19,20,21,22,23,24, 25,26,27,28,29,30,31, 32,33,34,35,36,37,38, 39,40	8-719-955-25	LED,PY5525S,YEL
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MS-07 BOARD (BVH-2000PS-00,02,10,12/2180PS-00,02)

1pc (for 00/02/10/12 model)	() 1-606-709-00	PC BOARD,MS-07 WITHOUT COMPONENT
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R1,2,3,4,5,6,7,8,9,10, 11,12	1-247-811-00	RES,CARBON 150 5% 1/6W
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SW1,2,3,4,5,6,7,8,9,10, 11,12	1-554-048-00	SWITCH,PUSH
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CN821M	() 1-560-729-00	RECEP,34P,MALE
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Ref.No. or Q'ty	Part No.	Description
MS-08 BOARD (BVH-2000PS-04/14,2180PS-04)		
1pc (for 04/14 model)	() 1-606-710-00	PC BOARD,MS-08 WITHOUT COMPONENT

R1,2,3,4,5	1-247-811-00	RES,CARBON 150 5% 1/6W
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SW1,2,3,4,5	1-554-048-00	SWITCH,PUSH
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CN821M	() 1-560-729-00	RECEP,34P,MALE
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AC-39 BOARD (BVH-2000PS,2180PS/POWER SUPPLY)

1pc	() A-4925-001-A	△ COMPLETE PCB,AC-39
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(This assembly includes the following parts.)

C323	1-123-885-00	CAP,ELECT 47 10V
C315,316	1-123-890-00	CAP,ELECT 2.2 400V

C322,324,330,331	1-123-903-00	CAP,ELECT 47 16V
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C321,325	1-124-115-00	CAP,ELECT 10 16V
C332	1-124-116-00	CAP,ELECT 22 16V

C320	1-124-164-00	CAP,ELECT 4.7 50V
C317	1-130-777-00	CAP,POLY 0.1 10% 100V
C318,319	1-130-781-00	CAP,POLY 0.22 10% 100V

C301,302,304	1-130-917-00	△ CAP,POLY 0.1 20% 250V
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Ref. No.
or Q'ty Part No. Description

(AC-39 BOARD, POWER SUPPLY)

C305, 306, 307, 308, 309,
310, 311, 312, 313, 314,
326, 327, 328, 329

1-130-926-00 Δ CAP, POLY 0.0033 20% 250V

R301 1-202-726-00 Δ RES, COMP 3.9M 10% 1/2W

R316, 317 1-205-677-00 Δ RES, WIREWOUND 1K 5% 5W

R315, 341 1-205-678-00 Δ RES, WIREWOUND 16K 5% 5W

R302, 303, 360

1-205-679-00 Δ RES, WIREWOUND 3.3 5% 20W

R306 1-215-857-11 Δ RES, METAL 10 5% 1W

R333 1-215-903-11 Δ RES, METAL 68K 5% 2W

R304, 305 1-214-918-00 RES, METAL 160K 1% 1/2W

RV303 1-228-867-00 RES, VAR, METAL 2K

RV301, 302

1-228-868-00 RES, VAR, METAL 10K

R323, 350 1-246-525-00 RES, CARBON 150K 5% 1/4W

R336 1-246-543-00 RES, CARBON 820K 5% 1/4W

R332, 358 1-247-083-00 RES, CARBON 10 5% 1/4W

R319, 324, 325, 337

1-247-107-00 RES, CARBON 100 5% 1/4W

R314, 318, 326, 331, 338,

339, 347, 359

1-247-131-00 RES, CARBON 1K 5% 1/4W

R309 1-247-141-00 RES, CARBON 2.7K 5% 1/4W

R310, 330 1-247-143-00 RES, CARBON 3.3K 5% 1/4W

R312, 335 1-247-147-00 RES, CARBON 4.7K 5% 1/4W

R322, 329 1-247-149-00 RES, CARBON 5.6K 5% 1/4W

R308 1-247-152-00 RES, CARBON 7.5K 5% 1/4W

R311, 313, 328, 348, 353

1-247-155-00 RES, CARBON 10K 5% 1/4W

R352 1-247-159-00 RES, CARBON 15K 5% 1/4W

R356 1-247-161-00 RES, CARBON 18K 5% 1/4W

R349, 354 1-247-167-00 RES, CARBON 33K 5% 1/4W

R357 1-247-171-00 RES, CARBON 47K 5% 1/4W

Ref. No.
or Q'ty Part No. Description

(AC-39 BOARD, POWER SUPPLY)

R351, 355 1-247-175-00 RES, CARBON 68K 5% 1/4W

R327 1-247-232-00 RES, CARBON 470 5% 1/2W

R321, 334, 342, 346

1-247-281-00 RES, CARBON 51K 5% 1/2W

R344, 345 1-247-269-00 RES, CARBON 16K 5% 1/2W

R320, 343 1-247-270-00 RES, CARBON 18K 5% 1/2W

R307, 340 1-214-920-00 Δ RES, CARBON 200K 5% 1/2W

L301, 302 1-421-532-00 COIL, CHOKE

L303 1-421-534-00 Δ TRANSFORMER, CHOKE

L306 1-441-855-00 COIL, CHOKE

L304, 305 1-459-215-00 COIL, CHOKE

CN309F, 310F

() 1-509-984-00 PLUG, HOUSING, 3P

() 1-560-298-00 CONTACT, FEMALE

RY301 1-515-450-00 Δ RELAY, 12V 180-OHM

F301 1-532-496-00 Δ FUSE, 109C

CN303M () 1-560-176-00 Δ RECEP, 2P, MALE

CN312M () 1-560-177-00 Δ RECEP, 4P, MALE

CN309M, 310M

() 1-560-300-00 RECEP, 3P, MALE

CN305M, 311M

() 1-560-310-00 RECEP, 4P, MALE

C306M () 1-560-753-00 RECEP, 5P, MALE

CN308M () 1-560-888-00 RECEP, 3P, MALE

CN307M () 1-560-889-00 RECEP, 5P, MALE

CN304F () 1-561-977-00 Δ RECEP, 2P, FEMALE

CN301F () 1-561-978-00 Δ RECEP, 3P, FEMALE

CN302F () 1-561-979-00 Δ RECEP, 4P, FEMALE

D332 8-719-100-34 DIODE RD5.6E-B1

Ref.No. or Q'ty	Part No.	Description
(AC-39 BOARD, POWER SUPPLY)		
D303,304,314,318,323	8-719-100-40	DIODE RD6.8E-B1
D334	8-719-100-56	DIODE RD10E-B1
D306,307	8-719-100-70	DIODE RD15E-B1
D310	8-719-100-98	DIODE RD30E-B2
D311	8-719-104-17	DIODE 2P5M
D308	8-719-107-87	DIODE 03P2M
D312,313,321,322	8-719-110-00	DIODE RD100E
D309,320	8-719-200-02	DIODE 10E2
PH301	8-719-411-12	PHOTO INTERRUPTER ON1102
D301	8-719-500-07	DIODE S25VB60
D302,305,315,316,317, 319,324,325,326,327, 333	8-719-815-55	DIODE 1S1555
D328,329,330,331	8-719-911-55	DIODE U05G
Q304	8-729-177-43	TRANSISTOR 2SD774
Q303	8-729-217-33	TRANSISTOR 2SC1173
Q302,308	8-729-612-77	TRANSISTOR 2SA1027R
Q301,305,306,307,309	8-729-663-47	TRANSISTOR 2SC1364
IC301	8-759-132-40	IC UPC324C

Ref.No. or Q'ty	Part No.	Description
FV-02 BOARD (BVH-2000PS, 2180PS/POWER SUPPLY)		

1pc () A-4925-004-B Δ COMPLETE PCB, FV-02

(This assembly includes the following parts.)

1pc () A-4925-011-B COMPLETE PCB, FV-03
 1pc () A-4925-012-A COMPLETE PCB, CT-36-2
 1pc () A-4925-013-A COMPLETE PCB, CT-36-3

Q601&602,
603&604 X-3673-684-0 TRANSISTOR 2SC2555, 2pcs
 This part is the kit of two transistors.
 Replace Q601&602 at the same time.
 Replace Q603&604 at the same time.

C617,633 1-108-587-00 CAP, MYLAR 0.022 5% 50V

C635,636 1-123-324-00 CAP, ELECT 1000 16V

C603,604,619,620
 1-123-601-00 CAP, ELECT 4.7 250V

C613,629,640,684,691
 1-123-961-00 CAP, ELECT 330 16V

C608,609,610,624,625
 626,699 1-124-129-00 CAP, ELECT 2200 25V

C602,618 1-125-290-00 CAP, ELECT 47 400V

C611,612,614,615,616,
 627,628,630,631,632,
 637,638,639,641,681,
 682,683,685,690,692
 1-130-777-00 CAP, POLY 0.1 10% 100V

C601 1-130-808-00 CAP, POLY 0.22 10% 400V

C605,621 1-161-740-00 Δ CAP, CERAMIC
 470PF 10% 400V

C606,622,642,643,644
 1-161-741-00 Δ CAP, CERAMIC
 0.001 10% 400V

Ref.No.
or Q'ty Part No. Description

(FV-02 BOARD,POWER SUPPLY)

C607,623,634

1-161-742-00 ⚠ CAP,CERAMIC
0.0022 20% 400V

C686,687,688,689

1-161-915-00 CAP,CERAMIC
0.001 10% 500V

R604,613 1-205-622-00 RES,WIREWOUND 33 5% 5W

R606,615,618

1-205-623-00 RES,WIREWOUND 47 5% 5W

R605,614 1-205-631-00 RES,WIREWOUND 15 5% 5W

R603,612 1-205-641-00 RES,WIREWOUND 330 5% 5W

R607,616 1-205-657-00 RES,WIREWOUND 150 5% 5W

R621 1-244-941-00 RES,CARBON 680K 5% 1/2W

R608,617 1-247-079-00 RES,CARBON 4.7 5% 1/4W

R601,602,610,611

1-247-087-00 RES,CARBON 15 5% 1/4W

R619 1-247-123-00 RES,CARBON 470 5% 1/4W

R609,620 1-247-244-00 RES,CARBON 1500 5% 1/2W

L681 1-421-225-00 FILTER,LINE

L610 1-421-259-00 FILTER,LINE

L609 1-421-370-00 COIL,CHOKE

L608 1-421-431-00 COIL,CHOKE

T603,606 1-421-460-00 ⚠ TRANSFORMER,CURRENT

L601 1-421-470-21 FILTER,LINE

L603,606 1-421-506-00 COIL,CHOKE

L602,605 1-421-531-00 COIL,CHOKE

L604,607 1-421-535-00 FILTER,LINE

L682 1-421-538-00 FILTER,LINE

T602,605 1-447-106-00 ⚠ TRANSFORMER,DRIVE

T601 1-447-329-00 ⚠ TRANSFORMER,CONVERTER

T604 1-447-330-00 ⚠ TRANSFORMER,CONVERTER

Ref.No.
or Q'ty Part No. Description

(FV-02 BOARD,POWER SUPPLY)

FB601,602,603,604,605,

606,607,608,609,610,

611,612,613,614

1-543-060-00 BEAD,FERRITE

S602 1-554-047-00 SWITCH,THERMAL REED 90°C

S601 1-554-047-21 SWITCH,THERMAL REED 70°C

CN601M () 1-560-176-00 RECEP,2P,MALE

CN603M () 1-560-300-00 RECEP,3P,MALE

CN602M () 1-560-305-00 RECEP,10P,MALE

CN930M,931M

() 1-560-309-00 RECEP,3P,MALE

CN926M () 1-560-314-00 RECEP,10P,MALE

CN927M () 1-560-887-00 RECEP,17P,MALE

D608 8-719-100-67 DIODE RD13E-B1

D607 8-719-300-29 DIODE CTG-31S

D603,606 8-719-820-15 LED,TLG115A,GRN

D601,602,604,605

8-719-902-43 DIODE ESAD33-02CS

Q605 8-729-331-53 TRANSISTOR 2SC2315

Ref.No. or Q'ty	Part No.	Description
<u>VV-01 BOARD (BVH-2000PS,2180PS/POWER SUPPLY)</u>		
1pc	() A-4925-003-B	△ COMPLETE PCB,VV-01
(This assembly includes the following parts.)		
4pcs	() A-4925-006-A	COMPLETE PCB,CT-37
3pcs	() A-4925-015-A	COMPLETE PCB,CT-36-7
Q201&202, 205&206, 209&210	X-3673-684-0	TRANSISTOR 2SC2555,2pcs This part is the kit of two transistors. Replace Q201&Q202 at the same time. Replace Q205&Q206 at the same time. Replace Q209&Q210 at the same time.
C212,227,241	1-106-190-00	CAP,MYLAR 0.0056 5% 100V
C265,266,267	1-108-377-00	CAP,MYLAR 0.01 10% 100V
C208,214,222,229,237, 244,252	1-108-587-00	CAP,MYLAR 0.022 5% 50V
C204,205,219,220,234, 235	1-123-601-00	CAP,ELECT 4.7 250V
C217,232,247,255	1-123-961-00	CAP,ELECT 330 16V
C216,231,246,254	1-124-131-00	CAP,ELECT 47 100V
C211,213,215,226,228, 230,242,243,245,250, 251,253	1-124-132-00	CAP,ELECT 330 100V
C202,203	1-125-290-00	CAP,ELECT 47 400V
C207,209,218,223,224, 233,238,239,248,256, 260,261,262,263,264	1-130-777-00	CAP,POLY,0.1 10% 100V

Ref.No. or Q'ty	Part No.	Description
(VV-01 BOARD,POWER SUPPLY)		
C201	1-130-808-00	CAP,POLY,0.22 10% 400V
C210,225,240	1-161-740-00	△ CAP,CERAMIC 470PF 10% 400V
C206,221,236,249,257, 258,259	1-161-741-00	△ CAP,CERAMIC 0.001 10% 400V
R205,215,223,232,238, 247,256	1-205-623-00	RES,WIREWOUND 47 5% 5W
R207,208,224,225,241, 242,252,253	1-205-624-00	RES,WIREWOUND 100 5% 5W
R201,218,235	1-205-625-00	RES,WIREWOUND 220 5% 5W
R206,221,239	1-205-657-00	RES,WIREWOUND 150 5% 5W
R212,229,246,255	1-217-596-00	RES,METAL 0.05 10% 2W
R262	1-244-941-00	RES,CARBON 680K 5% 1/2W
R213,230,249,257	1-247-071-00	RES,CARBON 1 5% 1/4W
R204,222,240	1-247-080-00	RES,CARBON 5.6 5% 1/4W
R202,203,219,220,236, 237	1-247-087-00	RES,CARBON 15 5% 1/4W
R214,231,250,258	1-247-107-00	RES,CARBON 100 5% 1/4W
R216,233,248,263	1-247-125-00	RES,CARBON 560 5% 1/4W
R211,228,244	1-247-161-00	RES,CARBON 18K 5% 1/4W

Ref. No. or Q'ty	Part No.	Description
(VV-01 BOARD, POWER SUPPLY)		
R209, 226, 245	1-247-167-00	RES, CARBON 33K 5% 1/4W
R217, 234, 251	1-247-168-00	RES, CARBON 36K 5% 1/4W
R210, 227, 243	1-247-176-00	RES, CARBON 75K 5% 1/4W
R254	1-247-274-00	RES, CARBON 27K 5% 1/2W
L205, 210, 215, 220	1-421-329-00	COIL, CHOKE
L206, 211, 216, 221	1-421-458-00	FILTER, LINE
T202, 206, 210	1-421-460-00	⚠ TRANSFORMER, CURRENT
L201	1-421-470-21	FILTER, LINE
L202, 207, 212, 217	1-421-539-00	COIL, CHOKE
L204, 209, 214, 219	1-421-540-00	COIL, CHOKE
T204, 208, 212, 213	1-437-114-00	TRANSFORMER, DRIVE
T203, 207, 211	1-447-106-00	⚠ TRANSFORMER, DRIVE
T201, 205	1-447-334-00	⚠ TRANSFORMER, CONVERTER
T209	1-447-335-00	⚠ TRANSFORMER, CONVERTER
FB201, 202, 203, 204, 205, 206, 207, 209, 210, 211, 212, 213, 215, 216, 217, 218, 219, 221, 222, 223, 224, 225, 227, 228, 229, 230	1-543-060-00	BEAD, FERRITE
CN201M	() 1-560-176-00	RECEP, 2P, MALE

Ref. No. or Q'ty	Part No.	Description
(VV-01 BOARD, POWER SUPPLY)		
CN202M, 203M	() 1-560-303-00	RECEP, 6P, MALE
CN925M	() 1-560-313-00	RECEP, 8P, MALE
CN924M	() 1-560-886-00	RECEP, 11P, MALE
D204, 208, 212, 216	8-719-300-29	DIODE CTG-31S
D201, 205, 209, 213	8-719-300-52	DIODE CTU-38R
D202, 206, 210, 214	8-719-300-53	DIODE CTU-38S
D203, 207, 211, 215	8-719-981-01	DIODE ERA81-004
Q204, 208, 212, 214	8-729-177-43	TRANSISTOR 2SD774
Q203, 207, 211, 213	8-729-906-51	TRANSISTOR 2SC2944-02

FV-01 BOARD (BVH-2000PS, 2180PS/POWER SUPPLY)

1pc () A-4925-002-B ⚠ COMPLETE PCB, FV-01

(This assembly includes the following parts.)

1pc	() A-4925-005-A	COMPLETE PCB, CT-36-1
1pc	() A-4925-007-A	COMPLETE PCB, CT-38
1pc	() A-4925-008-A	COMPLETE PCB, PA-19
1pc	() A-4925-009-A	COMPLETE PCB, ST-21
1pc	() A-4925-014-A	COMPLETE PCB, CT-36-4

Ref.No. or Q'ty	Part No.	Description
(FV-01 BOARD, POWER SUPPLY)		
Q101&102,		
103&104	X-3673-684-0	TRANSISTOR 2SC2555, 2pcs This part is the kit of two transistors. Replace Q101&102 at the same time. Replace Q103&104 at the same time.
Q105&106	X-3673-685-0	TRANSISTOR 2SC2654, 2pcs This part is the kit of two transistors. Replace Q105&106 at the same time.
C180	1-106-172-00	CAP, MYLAR 0.001 5% 100V
C112, 135	1-108-587-00	CAP, MYLAR 0.022 5% 50V
C175, 177, 179	1-123-356-00	CAP, ELECT 10 50V
C103, 104, 123, 124	1-123-601-00	CAP, ELECT 4.7 250V
C127, 128, 148, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 174, 176, 178	1-123-876-00	CAP, ELECT 330 25V
C121, 146, 150	1-123-961-00	CAP, ELECT 330 16V
C113, 114, 115, 116, 117	1-123-962-00	CAP, ELECT 2200 16V
C137, 171, 172	1-124-126-00	CAP, ELECT 47 25V
C140, 141, 143, 144	1-124-129-00	CAP, ELECT 2200 25V
C102, 122	1-125-290-00	CAP, ELECT 47 400V
C181	1-130-711-00	△ CAP, POLY 0.22 20% 250V
C106, 107, 108, 111, 118, 119, 120, 132, 133, 134, 139, 145, 147, 149	1-130-777-00	CAP, POLY 0.1 10% 100V

Ref.No. or Q'ty	Part No.	Description
(FV-01 BOARD, POWER SUPPLY)		
C101, 125	1-130-808-00	CAP, POLY 0.22 10% 400V
C173	1-130-918-00	CAP, POLYPROPYLENE 200PF 5% 50V
C105, 126, 138, 142	1-161-740-00	△ CAP, CERAMIC 470PF 10% 400V
C109, 129, 130, 131	1-161-741-00	△ CAP, CERAMIC 0.001 10% 400V
C110	1-161-742-00	△ CAP, CERAMIC 0.0022 20% 400V
C136	1-161-925-00	CAP, CERAMIC 100PF 10% 500V
R110, 116, 117	1-205-622-00	RES, WIREWOUND 33 5% 5W
R119	1-205-623-00	RES, WIREWOUND 47 5% 5W
R105, 118	1-205-625-00	RES, WIREWOUND 220 5% 5W
R109	1-205-631-00	RES, WIREWOUND 15 5% 5W
R101, 102, 111, 112	1-205-657-00	RES, WIREWOUND 150 5% 5W
R141, 142	1-205-658-00	RES, WIREWOUND 0.22 5% 5W
R135, 138	1-206-656-00	RES, METAL 470 5% 2W
R123	1-217-596-00	RES, METAL 0.05 10% 2W
R106, 120	1-247-079-00	RES, CARBON 4.7 5% 1/4W
R103, 104, 113, 114	1-247-087-00	RES, CARBON 15 5% 1/4W
R126, 127	1-247-099-00	RES, CARBON 47 5% 1/4W
R134	1-247-107-00	RES, CARBON 100 5% 1/4W
R137, 140	1-247-108-00	RES, CARBON 110 5% 1/4W
R122, 133, 144, 145	1-247-131-00	RES, CARBON 1K 5% 1/4W
R131, 136, 139	1-247-143-00	RES, CARBON 3300 5% 1/4W

Ref.No. or Q'ty	Part No.	Description
(FV-01 BOARD, POWER SUPPLY)		
R132	1-247-147-00	RES, CARBON 4700 5% 1/4W
R107, 108, 143	1-247-200-00	RES, CARBON 22 5% 1/2W
R129	1-247-232-00	RES, CARBON 470 5% 1/2W
R115, 130	1-247-242-00	RES, CARBON 1200 5% 1/2W
R128	1-247-246-00	RES, CARBON 1800 5% 1/2W
R121	1-247-264-00	RES, CARBON 10K 5% 1/2W
L112, 132	1-421-225-00	FILTER, LINE
L107, 109	1-421-370-00	COIL, CHOKE
L111, 113, 115, 117, 118, 120, 122, 124, 126, 128, 130	1-421-421-00	COIL, CHOKE
L106, 108	1-421-431-00	COIL, CHOKE
L133	1-421-458-00	FILTER, LINE
T103, 107	1-421-460-00	⚠ TRANSFORMER, CURRENT
L101	1-421-470-21	FILTER, LINE
L103, 104	1-421-506-00	COIL, CHOKE
L102	1-421-533-00	COIL, CHOKE
L105	1-421-535-00	FILTER, LINE
L119	1-421-536-00	FILTER, LINE
L114, 116, 121, 123, 125, 127, 129, 131	1-421-537-21	FILTER, LINE
T109	1-437-116-00	TRANSFORMER, PULSE
T106	1-447-053-00	⚠ TRANSFORMER, CONVERTER
T102, 105	1-447-106-00	⚠ TRANSFORMER, DRIVE
T101	1-447-328-00	⚠ TRANSFORMER, CONVERTER
T104	1-447-331-00	⚠ TRANSFORMER, CONVERTER
T108	1-447-332-00	TRANSFORMER, CONVERTER
L110	1-459-123-00	COIL, CHOKE

Ref.No. or Q'ty	Part No.	Description
(FV-01 BOARD, POWER SUPPLY)		
RY101, 102	1-515-482-00	RELAY, REED, 12V 340-OHM
FB101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114	1-543-060-00	BEAD, FERRITE
S102	1-554-047-00	SWITCH, THERMAL REED 90°C
S101	1-554-047-21	SWITCH, THERMAL REED 70°C
CN101M ()	1-560-176-00	RECEP, 2P, MALE
CN103M, 105M	() 1-560-300-00	RECEP, 3P, MALE
CN102M, 104M	() 1-560-301-00	RECEP, 4P, MALE
CN106M ()	1-560-305-00	RECEP, 10P, MALE
CN107M ()	1-560-306-00	RECEP, 12P, MALE
CN928M ()	1-560-311-00	RECEP, 5P, MALE
CN923M ()	1-560-312-00	RECEP, 6P, MALE
CN921M ()	1-560-315-00	RECEP, 12P, MALE
CN922F ()	1-561-086-00	PLUG, HOUSING, 9P
()	1-561-067-00	CONTACT, FEMALE
D149, 150, 154	8-719-100-70	DIODE RD15E-B1
D153	8-719-100-87	DIODE RD22E-B3
D105, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145	8-719-104-07	DIODE F114F
D106	8-719-200-02	DIODE 10E2
D101, 102	8-719-300-29	DIODE CTG-31S
D152	8-719-815-85	DIODE 1S1585

Ref.No. or Q'ty	Part No.	Description
(FV-01 BOARD, POWER SUPPLY)		
D146, 147, 148, 151	8-719-820-15	LED, TLG115A, GRN
D103, 104	8-719-902-43	DIODE ESAD33-02CS
Q109, 111	8-729-178-54	TRANSISTOR 2SC2785
Q107	8-729-194-57	TRANSISTOR 2SC945-P
Q112, 113	8-729-217-33	TRANSISTOR 2SC1173
Q108, 110	8-729-331-53	TRANSISTOR 2SC2315
IC102	8-759-178-05	IC UPC78L05
IC101	8-759-245-28	IC TC4528BP, CMOS

PS-14 BOARD (BVH-2000PS, 2180PS/POWER SUPPLY)

1pc () A-6023-030-A COMPLETE PCB, PS-14
(This assembly includes the following parts.)

C6, 16, 20, 25, 33, 38, 47, 50,
56, 60, 63, 68, 73

1-102-110-00 CAP, CERAMIC
220PF 10% 50V

C8, 17, 21, 26, 32, 37, 46, 51,
55, 59, 64, 67, 72

1-102-121-00 CAP, CERAMIC
0.0022 10% 50V

C18, 22, 34, 48, 57, 61, 88,
89, 90, 91, 92

1-123-308-00 CAP, ELECT 220 10V

C31 1-123-321-00 CAP, ELECT 220 16V
C24 1-123-332-00 CAP, ELECT 47 25V

C15, 19, 36, 44, 49, 54, 58,
62, 66, 71, 75, 98, 100

1-123-333-00 CAP, ELECT 100 25V

Ref.No. or Q'ty	Part No.	Description
(PS-14 BOARD, POWER SUPPLY)		
C102	1-123-356-00	CAP, ELECT 10 50V
C82	1-123-372-00	CAP, ELECT 33 63V
C10, 28, 40, 52, 70, 83, 118	1-123-380-00	CAP, ELECT 1 100V
C76, 81	1-123-851-00	CAP, ELECT 330 25V
C3, 4	1-123-862-00	CAP, ELECT 220 25V
C13, 42	1-123-880-11	CAP, ELECT, NONPOLAR 47 16V

C84, 86, 93, 95, 97

1-123-963-00 CAP, ELECT 100 25V

C9, 14, 27, 41, 43, 45, 53, 65,
103, 104, 105, 106, 107,
108, 109, 110, 111, 112,
113, 114, 115, 116, 117

1-161-055-00 CAP, CERAMIC
0.022 10% 50V

C1, 2, 5, 77, 78, 79, 80, 85,
87, 94, 96, 99, 101

1-161-926-00 CAP, CERAMIC 0.22 10% 50V

R70, 111 1-212-364-00 Δ RES, METAL 2.2 5% 1W

R58 1-212-366-00 Δ RES, METAL 3.3 5% 1W

R75, 78 1-213-135-00 Δ RES, METAL 220 5% 1W

R141, 144, 145
1-213-140-00 Δ RES, METAL 560 5% 1W

R231 1-214-111-00 RES, METAL 130 1% 1/4W

R232 1-214-129-00 RES, METAL 750 1% 1/4W

R269 1-214-132-00 RES, METAL 1K 1% 1/4W

R89, 101 1-214-136-00 RES, METAL 1.5K 1% 1/4W

R207, 218 1-214-140-00 RES, METAL 2.2K 1% 1/4W

R155, 178, 191

1-214-144-00 RES, METAL 3.3K 1% 1/4W

R67, 108, 124

1-214-147-00 RES, METAL 4.3K 1% 1/4W

Ref.No. or Q'ty	Part No.	Description
(PS-14 BOARD, POWER SUPPLY)		
R135, 163, 200, 212	1-214-149-00	RES, METAL 5.1K 1% 1/4W
R96	1-214-150-00	RES, METAL 5.6K 1% 1/4W
R85, 87, 151, 153, 174, 176, 185, 187, 221, 223	1-214-151-00	RES, METAL 6.2K 1% 1/4W
R98	1-214-152-00	RES, METAL 6.8K 1% 1/4W
R133, 161, 198, 210	1-214-153-00	RES, METAL 7.5K 1% 1/4W
R69, 110, 122	1-214-158-00	RES, METAL 12K 1% 1/4W
R68, 109, 123	1-214-163-00	RES, METAL 20K 1% 1/4W
R226, 230	1-214-164-00	RES, METAL 22K 1% 1/4W
R86, 97, 134, 152, 162, 175, 186, 199, 211, 222	1-214-167-00	RES, METAL 30K 1% 1/4W
R126	1-214-170-00	RES, METAL 39K 1% 1/4W
R259	1-217-212-00	RES, WIREWOUND 10 10% 2W
R10, 13, 37, 43, 46, 49	1-217-237-00	RES, WIREWOUND 0.1 10% 3W
R1, 4, 7, 16, 19, 22, 25	1-217-241-00	RES, WIREWOUND 0.22 10% 3W
R28, 31, 34, 40, 52, 55	1-217-243-00	RES, WIREWOUND 0.33 10% 3W
R260, 261	1-217-259-00	RES, WIREWOUND 6.8 10% 3W
R258	1-217-294-00	RES, WIREWOUND 4.7 10% 5W
RV1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	1-230-843-11	RES, VAR, METAL 10K

Ref.No. or Q'ty	Part No.	Description
(PS-14 BOARD, POWER SUPPLY)		
R79, 104, 129, 242, 243, 245, 249, 251	1-247-078-00	RES, CARBON 3.9 5% 1/4W
R240	1-247-082-00	RES, CARBON 8.2 5% 1/4W
R267	1-247-120-00	RES, CARBON 360 5% 1/4W
R265, 270	1-247-131-00	RES, CARBON 1K 5% 1/4W
R266	1-247-137-00	RES, CARBON 1.8K 5% 1/4W
R279	1-247-158-00	RES, CARBON 13K 5% 1/4W
R61	1-247-180-00	RES, CARBON 1 5% 1/2W
R234, 235, 236, 238, 239, 241, 244, 246, 247, 248, 250, 252, 253, 255, 256	1-247-783-00	RES, CARBON 10 5% 1/6W
R205, 216	1-247-807-00	RES, CARBON 100 5% 1/6W
R2, 5, 8, 11, 14, 29, 32, 35, 38, 41, 44, 48, 51, 53, 56	1-247-815-00	RES, CARBON 220 5% 1/6W
R277	1-247-816-00	RES, CARBON 240K 5% 1/6W
R15	1-247-819-00	RES, CARBON 330 5% 1/6W
R39, 45	1-247-820-00	RES, CARBON 360 5% 1/6W
R12	1-247-821-00	RES, CARBON 390 5% 1/6W
R17, 20, 23, 26	1-247-822-00	RES, CARBON 430 5% 1/6W
R276	1-247-824-00	RES, CARBON 510 5% 1/6W
R47, 50	1-247-827-00	RES, CARBON 680 5% 1/6W
R59, 62, 268	1-247-831-00	RES, CARBON 1K 5% 1/6W
R74, 81, 93, 115, 117	1-247-839-00	RES, CARBON 2.2K 5% 1/6W
R42	1-247-840-00	RES, CARBON 2.4K 5% 1/6W
R88, 100	1-247-842-00	RES, CARBON 3K 5% 1/6W
R64, 66, 80, 83, 92, 95, 105, 106, 120, 130, 132, 146, 149, 159, 169, 172, 184, 194, 195, 215, 219, 254, 262, 263	1-247-843-00	RES, CARBON 3.3K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(PS-14 BOARD, POWER SUPPLY)		
R33, 36, 54, 57, 148, 170, 182, 272, 273, 274, 275	1-247-847-00	RES, CARBON 4.7K 5% 1/6W
R60, 63	1-247-848-00	RES, CARBON 5.1K 5% 1/6W
R30	1-247-849-00	RES, CARBON 5.6K 5% 1/6W
R154, 177, 190	1-247-850-00	RES, CARBON 6.2K 5% 1/6W
R73, 114, 116, 139, 140, 166, 168, 203, 204, 264, 271	1-247-855-00	RES, CARBON 10K 5% 1/6W
R227	1-247-856-00	RES, CARBON 11K 5% 1/6W
R3, 6, 9	1-247-860-00	RES, CARBON 16K 5% 1/6W
R18, 21, 24, 27	1-247-863-00	RES, CARBON 22K 5% 1/6W
R72, 113	1-247-869-00	RES, CARBON 39K 5% 1/6W
R71, 112, 125, 137, 164, 201	1-247-870-00	RES, CARBON 43K 5% 1/6W
R65, 82, 94, 107, 118, 131, 147, 158, 171, 183, 206, 217, 233	1-247-871-00	RES, CARBON 47K 5% 1/6W
R138, 165, 202	1-247-872-00	RES, CARBON 51K 5% 1/6W
R209, 220	1-247-877-00	RES, CARBON 82K 5% 1/6W
L1	1-407-713-00	INDUCTOR, MICRO, 470 10%
RY1	1-515-452-00	RELAY, REED, 5V 380-OHM
CN913M	() 1-560-176-00	RECEP, 2P, MALE
CN911M, 912M	() 1-560-178-00	RECEP, 6P, MALE
CN905M, 918M	() 1-560-300-00	RECEP, 3P, MALE
CN917M	() 1-560-302-00	RECEP, 5P, MALE
CN916M	() 1-560-303-00	RECEP, 6P, MALE

Ref.No. or Q'ty	Part No.	Description
(PS-14 BOARD, POWER SUPPLY)		
CN903M, 915M	() 1-560-306-00	RECEP, 12P, MALE
CN902M	() 1-560-729-00	RECEP, 34P, MALE
CN901M	() 1-560-731-00	RECEP, 50P, MALE
CN914M	() 1-560-752-00	RECEP, 9P, MALE
CN904M	() 1-560-753-00	RECEP, 5P, MALE
1pc	1-570-258-12	SWITCH, THERMAL REED 90°C
19pcs	2-832-007-00	BUSHING(K), INSULATING
2pcs	() 3-303-890-01	SPRING, COMPRESSION
2pcs	() 3-651-849-00	SPACER, PANEL
TP23, 24, 25, 26	() 3-673-772-41	TERMINAL, TP
TP1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22	() 3-673-805-01	TERMINAL, TP
TPE1, 2, 3, 4, 5, 6	() 3-673-805-11	TERMINAL, TP
2pcs	3-680-316-00	NUT, M4, NYLON
19pcs	7-628-254-45	SCREW, PS 2.6x12
1pc	7-686-447-01	SCREW, PS 3x6
8pcs	7-686-527-01	SCREW, PSW 3x6
2pcs	7-686-640-09	SCREW, B 4x20
6pcs	() 7-687-603-24	SCREW, BTP 2.6x6
2pcs	7-688-004-12	WASHER, M4, MIDDLE
D18	8-719-151-07	DIODE RD5.1E-B
D1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 15, 17, 20, 21	8-719-815-55	DIODE 1S1555
D14	8-719-901-89	DIODE 1SS84
Q24, 33, 36, 39, 44, 53	8-729-117-54	TRANSISTOR 2SA1175
Q20, 22, 31, 37, 51, 54, 55	8-729-177-43	TRANSISTOR 2SD774
Q21, 25, 28, 40, 45, 48	8-729-374-02	TRANSISTOR 2SB740

Ref.No. or Q'ty	Part No.	Description
(PS-14 BOARD, POWER SUPPLY)		
Q27, 29, 42, 47, 50	8-729-606-32	TRANSISTOR 2SC2603
Q23, 32, 35, 38, 43, 52	8-729-625-91	TRANSISTOR 2SC2259
Q26, 30, 41, 46, 49	8-729-697-92	TRANSISTOR 2SA979
Q1, 2, 3, 6, 7, 8, 9, 10, 11, 12, 14, 18, 19	8-729-810-62	TRANSISTOR 2SD1061-R
Q4, 5, 13, 15, 16, 17	8-729-882-52	TRANSISTOR 2SB825-R
IC14	8-759-103-93	IC UPC393C
IC2, 6, 8, 10, 11, 12	8-759-145-57	IC UPC4557C
IC13	8-759-178-05	IC UPC78L05
IC1, 3, 4, 5, 7, 9	8-759-377-23	IC HA17723G

CN-54 BOARD (BVH-2000PS, 2180PS/POWER SUPPLY)

1pc	() 1-607-596-00	PC BOARD, CN-54, WITHOUT COMPONENT
C471, 472, 473	1-124-129-00	CAP, ELECT 2200 25V
R471	1-205-658-00	RES, WIREWOUND 0.22 5% 5W
CN470M, 471M	1-560-300-00	RECEP, 3P, MALE

Ref.No. or Q'ty	Part No.	Description
<u>LA-02 BOARD (BVH-2000PS-00, 02, 10, 12/2180PS-00, 02/CN PNL)</u>		

1pc (for 00/02/10/12 model)
 () A-6013-043-A COMPLETE PCB, LA-02
 (This assembly includes the following parts.)

Q4&9, 12&17, 104&108,
 204&208, 301&306

X-3673-688-0 TRANSISTOR KIT,
 2SC1162 & 2SA715

This part is the kit of 2SC1162 & 2SA715
 Replace the following two transistors
 at the same time.

Q4&9 Q12&17 Q104&108
 Q204&208 Q310&306

2SC1162 should be used for Q4, 12, 104,
 204 and 301.
 2SA715 should be used for Q7, 17, 108,
 208 and 306.

C18, 33, 104, 117, 204, 217, 303, 318, 321	1-107-077-00	CAP, MICA 47PF 5% 50V
C30, 45, 101, 119, 201, 219, 306, 317, 323, 324, 325	1-107-085-00	CAP, MICA 100PF 5% 50V
C27, 42, 113, 213, 313	1-107-208-00	CAP, MICA 18PF 5% 500V
C22, 37, 110, 210, 308	1-108-579-00	CAP, MYLAR 0.01 5% 50V
C11	1-108-587-00	CAP, MYLAR 0.022 5% 50V
C23, 38, 109, 209, 309	1-109-547-00	CAP, MICA 330PF 5% 100V
C118, 218, 328	1-109-553-00	CAP, MICA 470PF 5% 100V
C326	1-123-318-00	CAP, ELECT 33 16V
C21, 36, 107, 207, 307	1-123-321-00	CAP, ELECT 220 16V

Ref.No. or Q'ty	Part No.	Description	Ref.No. or Q'ty	Part No.	Description
(LA-02 BOARD,2000PS-00,02,10,12/2180PS-00,02,CN PNL)			(LA-02 BOARD,2000PS-00,02,10,12/2180PS-00,02,CN PNL)		
C17,26,32,41,105,114, 205,214,302,312	1-123-323-00	CAP,ELECT 470 16V	R27,44,50,67,102,124, 202,224,301,321	1-247-075-00	RES,CARBON 2.2 5% 1/4W
C1,2,3,4	1-123-330-00	CAP,ELECT 22 25V	R38,61,120,220,313	1-247-093-00	RES,CARBON 27 5% 1/4W
C5,8,9,19,28,34,43,103, 112,116,121,203,212, 216,221,304,314,316, 319,322,327	1-123-333-00	CAP,ELECT 100 25V	R48,71,123,223,322	1-247-775-00	RES,CARBON 4.7 5% 1/6W
C12,14,24,39,330,331	1-123-356-00	CAP,ELECT 10 50V	R28,51,101,201,302	1-247-799-00	RES,CARBON 47 5% 1/6W
C329	1-131-240-00	CAP,TANT 47 20% 16V	R29,30,52,53,106,107, 114,206,207,214,303, 304,318,338	1-247-807-00	RES,CARBON 100 5% 1/6W
C108,120,208,220,310, 320	1-131-359-00	CAP,TANT 10 10% 25V	R49,72,122,222,323	1-247-813-00	RES,CARBON 180 5% 1/6W
C6,7,10,13,15,16,20,25, 29,31,35,40,44,102, 106,111,115,202,206, 211,215,301,305,311, 315	1-161-055-00	CAP,CERAMIC 0.022 10% 50V	R127,130,134,227,230, 234,325,327,328,330, 336	1-247-815-00	RES,CARBON 220 5% 1/6W
R19	1-206-447-00	RES,METAL 2.2 5% 2W	R40,63,116,216,316	1-247-818-00	RES,CARBON 300 5% 1/6W
R42,65	1-215-396-00	RES,METAL 91 1% 1/6W	R18,33,34,56,57,110,111, 210,211,308,309	1-247-819-00	RES,CARBON 330 5% 1/6W
R41,64,115,215,317	1-215-421-00	RES,METAL 1K 1% 1/6W	R135,235,339	1-247-822-00	RES,CARBON 430 5% 1/6W
R31,54,105,205,305,	1-215-453-00	RES,METAL 22K 1% 1/6W	R125,126,131,132,225, 226,231,232,331,332, 335,341,342	1-247-826-00	RES,CARBON 620 5% 1/6W
RV102,202,302	1-224-941-00	RES,VAR,METAL 20K	R36,59,108,208,311	1-247-831-00	RES,CARBON 1K 5% 1/6W
RV1,2,101,201,301	1-230-837-11	RES,VAR,METAL 100	R1,2,11	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
RB1	1-231-410-00	RES BLOCK,10Kx8	R26	1-247-843-00	RES,CARBON 3.3K 5% 1/6W
RB2	1-231-533-00	RES BLOCK,10Kx4	R15,129,229,329	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R35,37,58,60,109,119, 209,219,310,312	1-247-073-00	RES,CARBON 1.5 5% 1/4W			

Ref.No. or Q'ty	Part No.	Description	Ref.No. or Q'ty	Part No.	Description
(LA-02 BOARD, 2000PS-00, 02, 10, 12/2180PS-00, 02, CN PNL)			(LA-02 BOARD, 2000PS-00, 02, 10, 12/2180PS-00, 02, CN PNL)		
R14, 20, 21, 22, 23, 24, 25, 121, 221, 324	1-247-847-00	RES, CARBON 4.7K 5% 1/6W	CN604M, 607M	() 1-560-302-00	RECEP, 5P, MALE
R73	1-247-849-00	RES, CARBON 5.6K 5% 1/6W	CN608M, 609M, 613M	() 1-560-303-00	RECEP, 6P, MALE
R133, 233, 340	1-247-851-00	RES, CARBON 6.8K 5% 1/6W	CN602M, 603M	() 1-560-304-00	RECEP, 8P, MALE
R43, 46, 66, 69, 112, 113, 212, 213, 319, 320	1-247-853-00	RES, CARBON 8.2K 5% 1/6W	CN605M, 614M, 615M	() 1-560-305-00	RECEP, 10P, MALE
R4, 5, 6, 7, 8, 9, 10	1-247-855-00	RES, CARBON 10K 5% 1/6W	CN606M, 612M	() 1-560-306-00	RECEP, 12P, MALE
R128, 228, 334, 337	1-247-861-00	RES, CARBON 18K 5% 1/6W	CN601M 12pcs	1-560-755-00 1-563-859-11	RECEP, 16P, MALE RECEPTACLE, CONNECTOR 2P
R47, 70, 103, 203, 307, 326	1-247-863-00	RES, CARBON 22K 5% 1/6W	JP101, 102, 103, 104, 105, 106, 107, 201, 202, 203, 204, 205, 206, 207, 301, 302, 303, 304, 305, 306, 307	1-566-385-11	PIN, CONNECTOR 2P
R17	1-247-864-00	RES, CARBON 24K 5% 1/6W	TP1, 2, 3, 4, 5, 6, 7, 8, 101, 102, 103, 104, 105, 201, 202, 203, 204, 205, 301, 302, 303, 304, 305, 306, 307, 308	() 3-673-805-01	TERMINAL, TP
R12, 32, 55, 104, 204, 306	1-247-865-00	RES, CARBON 27K 5% 1/6W	TPE1, 2, 3, 4, 5, 6, 101, 102, 103, 104, 105, 201, 202, 203, 204, 205, 301, 302, 303, 304, 305, 306, 307, 308	() 3-673-805-11	TERMINAL, TP
R3	1-247-869-00	RES, CARBON 39K 5% 1/6W	10pcs 7-621-981-15		SCREW, PSW 2.6x6
R39, 45, 62, 68, 117, 118, 217, 218, 314, 315, 333	1-247-871-00	RES, CARBON 47K 5% 1/6W	2pcs 7-686-527-01		SCREW, PSW 3x6
R74	1-247-874-00	RES, CARBON 62K 5% 1/6W	7pcs 7-686-528-01		SCREW, PSW 3x8
R13	1-247-877-00	RES, CARBON 82K 5% 1/6W	D4 8-719-151-07		DIODE RD5.1E-B
R16	1-247-879-00	RES, CARBON 100K 5% 1/6W	D1, 2, 3, 5, 6, 101, 201, 301	8-719-815-55	DIODE 1S1555
T102, 202, 302	1-423-260-11	TRANSFORMER, INPUT	D7, 8	8-719-911-19	DIODE 1SS119
T1, 2, 101, 201, 301	1-427-518-00	TRANSFORMER, AUDIO OUTPUT			
CN610M, 611M	() 1-560-301-00	RECEP, 4P, MALE			

Ref.No. or Q'ty	Part No.	Description
(LA-02 BOARD, 2000PS-00, 02, 10, 12/2180PS-00, 02, CN PNL)		
Q5, 13, 105, 205, 302	8-729-307-58	TRANSISTOR 2SC1775A
Q1	8-729-387-28	TRANSISTOR 2SA872-E
Q11, 19, 106, 206, 308	8-729-658-32	TRANSISTOR 2SC1583
Q2, 3	8-729-606-32	TRANSISTOR 2SC2603
Q7, 15, 102, 202, 304	8-729-699-51	TRANSISTOR 2SA995
IC7	8-759-178-05	IC UPC78L05
IC4	8-759-240-28	IC TC4028BP, CMOS
IC5, 6	8-759-240-51	IC TC4051BP, CMOS
IC3	8-759-241-75	IC TC40175BP, CMOS
IC101, 201, 301, 302	8-759-302-65	IC HA12017
IC1	8-759-645-17	IC M54517P
IC2	8-759-901-48	IC SN74LS148N, TTL
IC303	8-759-921-91	IC TL191CN
Q6, 10, 14, 18, 103, 107, 203, 207, 303, 307	8-761-622-00	TRANSISTOR 2SC1636
Q8, 16, 101, 201, 305	8-765-020-00	TRANSISTOR 2SA884

Ref.No. or Q'ty	Part No.	Description
LA-02 BOARD (BVH-2000PS-04/14, 2180PS-04/CN PNL)		
1pc	() A-6013-057-A	COMPLETE PCB, LA-02 (This assembly includes the following parts.)
Q4&9, 12&17, 104&108, 204&208, 301&306, 401&406	X-3673-688-0	TRANSISTOR KIT, 2SC1162 & 2SA715 This part is the kit of 2SC1162 & 2SA715. Replace the following two transistors at the same time.
	Q4&9	Q12&17 Q104&108
	Q204&208	Q310&306
		2SC1162 should be used for Q4, 12, 104, 204 and 301.
		2SA715 should be used for Q7, 17, 108, 208 and 306.
C18, 33, 104, 117, 204, 217, 303, 318, 321, 403, 417	1-107-077-00	CAP, MICA 47PF 5% 50V
C30, 45, 101, 119, 201, 219, 306, 317, 323, 324, 325, 406, 419	1-107-085-00	CAP, MICA 100PF 5% 50V
C27, 42, 113, 213, 313, 413	1-107-208-00	CAP, MICA 18PF 5% 500V
C22, 37, 110, 210, 308, 408	1-108-579-00	CAP, MYLAR 0.01 5% 50V
C11	1-108-587-00	CAP, MYLAR 0.022 5% 50V
C23, 38, 109, 209, 309, 409	1-109-547-00	CAP, MICA 330PF 5% 100V
C118, 218, 328, 421	1-109-553-00	CAP, MICA 470PF 5% 100V
C326	1-123-318-00	CAP, ELECT 33 16V
C21, 36, 107, 207, 307, 407	1-123-321-00	CAP, ELECT 220 16V

Ref.No. or Q'ty	Part No.	Description
(LA-02 BOARD, 2000PS-04, 14/2180PS-04, CN PNL)		
C17, 26, 32, 41, 105, 114, 205, 214, 302, 312, 402, 412	1-123-323-00	CAP, ELECT 470 16V
C1, 2, 3, 4	1-123-330-00	CAP, ELECT 22 25V
C5, 8, 9, 19, 28, 34, 43, 103, 112, 116, 121, 203, 212, 216, 221, 304, 314, 316, 319, 322, 327, 404, 414, 418, 420	1-123-333-00	CAP, ELECT 100 25V
C12, 14, 24, 39, 330, 331	1-123-356-00	CAP, ELECT 10 50V
C329	1-131-240-00	CAP, TANT 47 20% 16V
C108, 120, 208, 220, 310, 320, 410, 416	1-131-359-00	CAP, TANT 10 10% 25V
C6, 7, 10, 13, 15, 16, 20, 25, 29, 31, 35, 40, 44, 102, 106, 111, 115, 202, 206, 211, 215, 301, 305, 311, 315, 401, 405, 411, 415	1-161-055-00	CAP, CERAMIC 0.022 10% 50V
R19	1-206-447-00	RES, METAL 2.2 5% 2W
R42, 65	1-215-396-00	RES, METAL 91 1% 1/6W
R41, 64, 115, 215, 317, 417	1-215-421-00	RES, METAL 1K 1% 1/6W
R31, 54, 105, 205, 305, 405	1-215-453-00	RES, METAL 22K 1% 1/6W
RV102, 202, 302, 402	1-224-941-00	RES, VAR, METAL 20K
RV1, 2, 101, 201, 301, 401	1-230-837-11	RES, VAR, CERMET 100
RB1	1-231-410-00	RES BLOCK, 10Kx8
RB2	1-231-533-00	RES BLOCK, 10Kx4

Ref.No. or Q'ty	Part No.	Description
(LA-02 BOARD, 2000PS-04, 14/2180PS-04, CN PNL)		
R35, 37, 58, 60, 109, 119, 209, 219, 310, 312, 410, 412	1-247-073-00	RES, CARBON 1.5 5% 1/4W
R27, 44, 50, 67, 102, 124, 202, 224, 301, 321, 401, 421	1-247-075-00	RES, CARBON 2.2 5% 1/4W
R38, 61, 120, 220, 313, 413	1-247-093-00	RES, CARBON 27 5% 1/4W
R48, 71, 123, 223, 322, 422	1-247-775-00	RES, CARBON 4.7 5% 1/6W
R28, 51, 101, 201, 302, 402	1-247-799-00	RES, CARBON 47 5% 1/6W
R29, 30, 52, 53, 106, 107, 114, 206, 207, 214, 303, 304, 318, 338, 403, 404, 418	1-247-807-00	RES, CARBON 100 5% 1/6W
R49, 72, 122, 222, 323, 423	1-247-813-00	RES, CARBON 180 5% 1/6W
R127, 130, 134, 227, 230, 234, 325, 327, 328, 330, 336, 425, 427, 430	1-247-815-00	RES, CARBON 220 5% 1/6W
R40, 63, 116, 216, 316, 416	1-247-818-00	RES, CARBON 300 5% 1/6W
R18, 33, 34, 56, 57, 110, 111, 210, 211, 308, 309, 408, 409	1-247-819-00	RES, CARBON 330 5% 1/6W
R135, 235, 339, 432	1-247-822-00	RES, CARBON 430 5% 1/6W
R125, 126, 131, 132, 225, 226, 231, 232, 331, 332, 335, 341, 342, 428, 429, 434, 435	1-247-826-00	RES, CARBON 620 5% 1/6W
R36, 59, 108, 208, 311, 411	1-247-831-00	RES, CARBON 1K 5% 1/6W

Ref.No. or Qty	Part No.	Description
(LA-02 BOARD,2000PS-04,14/2180PS-04,CN PNL)		
R1,2,11	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R26	1-247-843-00	RES,CARBON 3.3K 5% 1/6W
R15,129,229,329,426	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R14,20,21,22,23,24,25, 121,221,324,424	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R73	1-247-849-00	RES,CARBON 5.6K 5% 1/6W
R133,233,340,433	1-247-851-00	RES,CARBON 6.8K 5% 1/6W
R43,46,66,69,112,113, 212,213,319,320,419, 420	1-247-853-00	RES,CARBON 8.2K 5% 1/6W
R4,5,6,7,8,9,10	1-247-855-00	RES,CARBON 10K 5% 1/6W
R128,228,334,337,431	1-247-861-00	RES,CARBON 18K 5% 1/6W
R47,70,103,203,307,326, 407	1-247-863-00	RES,CARBON 22K 5% 1/6W
R17	1-247-864-00	RES,CARBON 24K 5% 1/6W
R12,32,55,104,204,306, 406	1-247-865-00	RES,CARBON 27K 5% 1/6W
R3	1-247-869-00	RES,CARBON 39K 5% 1/6W
R39,45,62,68,117,118, 217,218,314,315,333, 414,415	1-247-871-00	RES,CARBON 47K 5% 1/6W
R74	1-247-874-00	RES,CARBON 62K 5% 1/6W
R13	1-247-877-00	RES,CARBON 82K 5% 1/6W
R16	1-247-879-00	RES,CARBON 100K 5% 1/6W
T102,202,302,402	1-423-260-11	TRANSFORMER, INPUT

Ref.No. or Qty	Part No.	Description
(LA-02 BOARD,2000PS-04,14/2180PS-04,CN PNL)		
T1,2,101,201,301,401	1-427-518-00	TRANSFORMER,AUDIO OUTPUT
CN610M,611M	() 1-560-301-00	RECEP,4P,MALE
CN604M,607M	() 1-560-302-00	RECEP,5P,MALE
CN608M,609M,613M	() 1-560-303-00	RECEP,6P,MALE
CN602M,603M	() 1-560-304-00	RECEP,8P,MALE
CN605M,614M,615M	() 1-560-305-00	RECEP,10P,MALE
CN606M,612M	() 1-560-306-00	RECEP,12P,MALE
JP101,102,103,104,105, 106,107,201,202,203, 204,205,206,207,301, 302,303,304,305,306, 307,401,402,403,404, 405,406,407	1-560-733-00	PIN,SHORT
CN601M	1-560-755-00	RECEP,16P,MALE
16pcs	1-561-832-00	PLUG,SHORT
TP1,2,3,4,5,6,7,8,101, 102,103,104,105,201, 202,203,204,205,301, 302,303,304,305,306, 307,308,401,402,403, 404,405	() 3-673-805-01	TERMINAL,TP
TPE1,2,3,4,5,6,101,102, 103,104,105,201,202, 203,204,205,301,302, 303,304,305,306,307, 308,401,402,403,404, 405	() 3-673-805-11	TERMINAL,TP

Ref.No. or Q'ty	Part No.	Description
(LA-02 BOARD, 2000PS-04, 14/2180PS-04, CN PNL)		
12pcs	7-621-981-15	SCREW, PSW 2.6x6
7pcs	7-686-527-01	SCREW, PSW 3x6
2pcs	7-686-528-01	SCREW, PSW 3x8
D4	8-719-151-07	DIODE RD5.1E-B
D1, 2, 3, 5, 6, 101, 201, 301, 401	8-719-815-55	DIODE 1S1555
D7, 8	8-719-911-19	DIODE 1SS119
Q5, 13, 105, 205, 302, 402	8-729-307-58	TRANSISTOR 2SC1775A
Q1	8-729-387-28	TRANSISTOR 2SA872-E
Q11, 19, 106, 206, 308, 408	8-729-658-32	TRANSISTOR 2SC1583
Q2, 3	8-729-663-47	TRANSISTOR 2SC1364
Q7, 15, 102, 202, 304, 404	8-729-699-51	TRANSISTOR 2SA995
IC7	8-759-178-05	IC UPC78L05
IC4	8-759-240-28	IC TC4028BP, CMOS
IC5, 6	8-759-240-51	IC TC4051BP, CMOS
IC3	8-759-241-75	IC TC40175BP, CMOS
IC101, 201, 301, 302, 401	8-759-305-50	IC CX550
IC1	8-759-645-17	IC M54517P
IC2	8-759-901-48	IC SN74LS148N, TTL
IC303	8-759-921-91	IC TL191CN
Q6, 10, 14, 18, 103, 107, 203, 207, 303, 307, 403, 407	8-761-622-00	TRANSISTOR 2SC1636
Q8, 16, 101, 201, 305, 405	8-765-020-00	TRANSISTOR 2SA884

Ref.No. or Q'ty	Part No.	Description
VM-01 BOARD (BVH-2000PS, 2180PS/CN PNL)		
1pc	() A-6011-062-A	COMPLETE PCB, VM-01 (This assembly includes the following parts.)
C31	1-106-184-00	CAP, MYLAR 0.0033 5% 100V
C10	1-107-160-00	CAP, MICA 36PF 5% 500V
C37	1-107-169-00	CAP, MICA 100PF 5% 500V
C11	1-107-170-00	CAP, MICA 110PF 5% 500V
C6	1-107-202-00	CAP, MICA 10PF 5% 500V
C42	1-107-204-00	CAP, MICA 12PF 5% 500V
C29	1-107-209-00	CAP, MICA 20PF 5% 500V
C2, 4, 35	1-108-587-00	CAP, MYLAR 0.022 5% 50V
C19	1-108-593-00	CAP, MYLAR 0.039 5% 50V
C7	1-109-538-00	CAP, MICA 130PF 5% 100V
C21, 36	1-109-539-00	CAP, MICA 150PF 5% 100V
C28	1-123-306-00	CAP, ELECT 47 10V
C83	1-123-308-00	CAP, ELECT 220 10V
C95, 96	1-123-318-00	CAP, ELECT 33 16V
C79, 81	1-123-321-00	CAP, ELECT 220 16V
C94	1-123-333-00	CAP, ELECT 100 25V
C17	1-123-379-00	CAP, ELECT 0.47 100V
C47	1-123-880-11	CAP, ELECT, NONPOLAR 47 16V
C44, 50, 57, 58	1-123-901-00	CAP, ELECT 2.2 50V
C1, 3, 8, 9, 15, 16, 18, 20, 22, 23, 24, 25, 26, 27, 30, 32, 33, 34, 38, 39, 40, 41, 43, 45, 46, 48, 49, 51, 52, 53, 54, 61, 63, 64, 66, 67, 69, 70, 71, 72, 73, 74, 75, 76, 77, 88, 89, 90, 91, 92, 93, 103, 104, 105, 106, 107, 108, 109, 110, 120, 121	1-161-051-00	CAP, CERAMIC 0.01 10% 50V
C5, 78, 80, 82, 84, 85, 86	1-161-057-00	CAP, CERAMIC 0.033 10% 50V

Ref.No. or Q'ty	Part No.	Description
(VM-01 BOARD,CN PNL)		
R102,104,105,132	1-214-100-00	RES,METAL 47 1% 1/4W
R107,108,109,112,116	1-214-101-00	RES,METAL 51 1% 1/4W
R32,81,128,130,134	1-214-104-00	RES,METAL 68 1% 1/4W
R89,90,91,92	1-214-105-00	RES,METAL 75 1% 1/4W
R106	1-214-108-00	RES,METAL 100 1% 1/4W
R88,93	1-214-112-00	RES,METAL 150 1% 1/4W
R83	1-214-139-00	RES,METAL 2K 1% 1/4W
R117,120,123	1-214-156-00	RES,METAL 10K 1% 1/4W
RV5	1-228-302-00	RES,VAR,CERMET 100
RV2	1-230-838-11	RES,VAR,METAL 200
RV4,6,7,8	1-230-839-11	RES,VAR,METAL 500
RV1,3	1-230-840-11	RES,VAR,METAL 1K
RB1,2,3,4,5,6	1-231-533-00	RES BLOCK,10Kx4
R17	1-247-767-00	RES,CARBON 2.2 5% 1/6W
R140,141,142,143,144, 145,146,147,148,149, 150,151,169,170,171, 172,173,174,175,176, 179,180,185,186,188, 189,191,192,194,195, 196,197,198,199	1-247-787-00	RES,CARBON 15 5% 1/6W
R18,85	1-247-795-00	RES,CARBON 33 5% 1/6W
R114	1-247-800-00	RES,CARBON 51 5% 1/6W

Ref.No. or Q'ty	Part No.	Description
(VM-01 BOARD,CN PNL)		
R23,27,33,34,35,41,49, 68,84,94,96,98,100,101, 103,111,113,115,119, 122,125,127,129,131, 133,139,152,157,159, 166,178,181,182,184, 187,190,193,200	1-247-807-00	RES,CARBON 100 5% 1/6W
R26,40	1-247-811-00	RES,CARBON 150 5% 1/6W
R21,65	1-247-818-00	RES,CARBON 300 5% 1/6W
R38	1-247-820-00	RES,CARBON 360 5% 1/6W
R22	1-247-822-00	RES,CARBON 430 5% 1/6W
R82,118,121,124,156,158, 161,162,163,164,167, 168	1-247-823-00	RES,CARBON 470 5% 1/6W
R69,70	1-247-827-00	RES,CARBON 680 5% 1/6W
R25,62,67,86,87	1-247-831-00	RES,CARBON 1K 5% 1/6W
R64	1-247-833-00	RES,CARBON 1.2K 5% 1/6W
R24	1-247-838-00	RES,CARBON 2K 5% 1/6W
R3,6,7,14	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
R73	1-247-842-00	RES,CARBON 3K 5% 1/6W
R77	1-247-845-00	RES,CARBON 3.9K 5% 1/6W
R1,2,4,5,8,9,10,11	1-247-847-00	RES,CARBON 4.7K 5% 1/6W
R42,43,44,60,61,80	1-247-848-00	RES,CARBON 5.1K 5% 1/6W
R15,20,36,46,47,50,53, 55,56,58,66,71,72,74, 78,79,97,137,138	1-247-855-00	RES,CARBON 10K 5% 1/6W
R76	1-247-858-00	RES,CARBON 13K 5% 1/6W
R63	1-247-863-00	RES,CARBON 22K 5% 1/6W
R37,48	1-247-866-00	RES,CARBON 30K 5% 1/6W
R12,13	1-247-869-00	RES,CARBON 39K 5% 1/6W

Ref.No. or Q'ty	Part No.	Description	Ref.No. or Q'ty	Part No.	Description
(VM-01 BOARD,CN PNL)			(VM-01 BOARD,CN PNL)		
R45	1-247-872-00	RES,CARBON 51K 5% 1/6W	Q4,5	8-729-110-53	TRANSISTOR 2SA1005
R19,51,57,75,126,135	1-247-879-00	RES,CARBON 100K 5% 1/6W	Q8,9,10,11	8-759-108-01	TRANSISTOR UPA68HA-M
R95,155,160,165	1-247-886-00	RES,CARBON 200K 5% 1/6W	IC12,22,29,30,31	8-743-930-00	IC BX-3930
R54	1-247-892-00	RES,CARBON 360K 5% 1/6W	IC9,11,13,21,23,24,25, 26,32,33,34,35	8-743-931-10	IC BX-3931A
R52	1-247-903-00	RES,CARBON 1M 5% 1/6W	IC3,4	8-759-240-13	IC TC4013BP,CMOS
L1	1-408-401-00	INDUCTOR,MICRO 2.2 5%	IC5	8-759-245-55	IC TC4555BP,CMOS
L2	1-408-421-00	INDUCTOR,MICRO 100 5%	IC6,7,8	8-759-645-17	IC M54517P
L3,4,5	1-409-339-00	COIL,SN	IC17	8-759-901-23	IC SN74LS123N,TTL
RY1,2,3,4,5,6,7,8	1-515-452-00	RELAY,REED,5V 380-OHM	IC1,2	8-759-901-48	IC SN74LS148N,TTL
FB1	1-535-178-00	FERRITE BEAD	IC19	8-759-942-65	IC SN74265N,TTL
S1,2,3	1-553-441-00	SWITCH,TOGGLE	IC18	8-759-951-07	IC SN75107AN,TTL
CN656M,658M	() 1-560-310-00	RECEP,4P,MALE	IC20	8-759-974-06	IC SN7406N,TTL
CN653M	() 1-560-312-00	RECEP,6P,MALE	IC14	8-759-990-82	IC TL082CP
CN654M,655M	() 1-560-313-00	RECEP,8P,MALE	IC15,16	8-759-990-84	IC TL084CN
CN652M	() 1-560-314-00	RECEP,10P,MALE	Q3	8-761-622-00	TRANSISTOR 2SC1636
CN657M	() 1-560-315-00	RECEP,12P,MALE	Q6	8-765-300-00	TRANSISTOR 2SC2009
CN651M	() 1-560-756-00	RECEP,20P,MALE	<u>CN-37 BOARD (BVH-2000PS,2180PS/CN PNL)</u>		
TPE1,2	() 3-673-772-01	TERMINAL,TP	1pc	() 1-606-713-00	PC BOARD,CN-37, WITHOUT COMPONENT
TP1,2,3	() 3-673-772-41	TERMINAL,TP			
6pcs	4-866-397-00	CUSHION,LED			
D14	8-719-168-07	DIODE RD6.8E-B			
D1,2,3,4,5,6,7,8,13	8-719-815-55	DIODE 1S1555			
D9,10,11,12	8-719-815-59	DIODE 1S1555-S			
Q1,2	8-723-302-00	TRANSISTOR 2SK43-2			

CN-49, FRAME

Ref.No. or Q'ty	Part No.	Description
<u>CN-49 BOARD (BVH-2000PS,2180PS/CN PNL)</u>		
1pc	() A-6025-082-A	COMPLETE PCB,CN-49
	() A-6025-095-A	COMPLETE PCB,CN-49
		(For BVH-2000PS 10,12,14 model)
		(This assembly includes the following parts.)
CN663M	1-560-769-00	RECEP,D-SUB 15-PIN,MALE
CN662F,664F		
	1-561-655-00	RECEP,D-SUB 9-PIN,FEMALE
CN661F	1-561-897-00	RECEP,D-SUB 15-PIN,FEMALE
CN666F	1-561-898-00	RECEP,D-SUB 37-PIN,FEMALE
CN665F	1-561-899-00	RECEP,D-SUB 50-PIN,FEMALE

Ref.No. or Q'ty	Part No.	Description
<u>FRAME (BVH-2000PS,2180PS)</u>		
M1	-----	MOTOR,THREADING Included in MOVABLE GUIDE ASSY. See the exploded view,MOVABLE GUIDE ASSY block.
M2	-----	MOTOR,IP ROLLER Included in IP ROLLER MOTOR ASSY. See the exploded view,TAPE TRANSPORT REAR ASSY block.
RV1	-----	POTENTIOMETER,S-TENSION Included in S TENSION ARM ASSY. See the exploded view,TENSION ARM & TIMER ROLLER ASSY block.
RV2	-----	POTENTIOMETER,T-TENSION Included in T TENSION ARM ASSY. See the exploded view,TENSION ARM & TIMER ROLLER ASSY block.
C011,012	1-125-289-00	CAP,ELECT 4700 200V
R601,602	1-214-105-00	RES,METAL 75 1% 1/4W
1pc	1-452-266-21	RING,FG MAGNET
PM4	1-454-263-21	SOLENOID,12V 60-OHM
PM1,2	1-454-304-00	SOLENOID,12V 15/180-OHM
PM3	1-454-305-00	SOLENOID,12V 20/52-OHM
CN631F	1-507-552-21	JACK,PHONE
CN626M (for 04/14 model), 625M,627M,628M,629M, 630M	1-509-176-31	RECEP,XLR3P,MALE
CN624F (for 04/14 model), 621F,622F,623F	1-509-184-31	RECEP,XLR3P,FEMALE
CN640F	1-509-471-00	RECEP,18P,FEMALE
CN007F	() 1-509-983-00 () 1-560-298-00	PLUG,HOUSING,2P CONTACT,FEMALE

Ref. No.
or Q'ty Part No. Description

(FRAME)

CN103F (to FV-01 board).
105F (to FV-01 board).
603F (to FV-02 board).
001F, 008F, 009F, 263F,
265F, 267F, 269F, 309F,
376F, 402F, 403F, 470F,
471F, 905F, 918F, 930F,
931F () 1-509-984-00 PLUG, HOUSING, 3P
 () 1-560-298-00 CONTACT, FEMALE

925F

CN362F (for 04/14 model).
102F (to FV-01 board).
104F (to FV-01 board).
305F (to AC-39 board).
311F (to AC-39 board).
021F, 022F, 024F, 262F,
354F, 355F, 384F, 387F,
401F (for BVH-2180PS).
610F, 611F, 656F, 658F,
803F
 () 1-509-985-00 PLUG, HOUSING, 4P
 () 1-560-298-00 CONTACT, FEMALE

CN282F (for 02/12/04/14 model).
365F (for 04/14 model).
003F, 004F, 023F,
042F (for BVH-2180PS).
112F, 261F, 353F, 361F,
373F, 374F, 377F, 386F,
604F, 607F, 805F, 808F,
917F, 928F
 () 1-509-986-00 PLUG, HOUSING, 5P
 () 1-560-298-00 CONTACT, FEMALE

CN202F (to RA-05 board).
202F (to VV-01 board).
203F (to VV-01 board).
204F, 351F, 371F, 372F,
381F, 383F, 608F, 609F,
613F, 653F, 800F, 801F,
812F, 916F, 923F
 () 1-509-987-00 PLUG, HOUSING, 6P
 () 1-560-298-00 CONTACT, FEMALE

Ref. No.
or Q'ty Part No. Description

(FRAME)

CN281F (for 02/04 model).
283F (for 02/04 model).
291F (for 02/04 model).
303F (to MB-14 board).
306F (to MB-14 board).
602F (to LA-02 board).
603F (to LA-02 board).
292F, 356F, 360F, 375F,
388F, 654F, 655F, 811F.

() 1-509-988-00 PLUG, HOUSING, 8P
() 1-560-298-00 CONTACT, FEMALE

CN106F (to CAPSTAN MOTOR).
106F (to FV-01 board).
302F (to MB-14 board).
305F (to MB-14 board).
602F (to FV-02 board).
002F, 357F, 363F, 382F,
605F, 614F, 615F, 652F,
804F, 806F, 810F, 926F
 () 1-509-989-00 PLUG, HOUSING, 10P
 () 1-560-298-00 CONTACT, FEMALE

ME4 (for 04/14 model).
1, 2, 3 1-520-450-00 METER, VU

ME5 1-520-451-00 METER, VIDEO/RF

CB301 1-532-653-00 ⚠ CIRCUIT PROTECTOR,
50mA/65V

CB302 1-532-654-00 ⚠ CIRCUIT BREAKER, 6A/240V

CB303 1-532-655-00 ⚠ CIRCUIT BREAKER, 10A/240V

TB001 () 1-536-712-00 ⚠ TERMINAL BOARD, 2P

M7, 8, 9, 10 1-541-170-21 FAN, DC 12V, FB-08B12HA
M301 1-541-203-00 FAN, DC 12V, FB-12C12L
S601, 602 1-552-078-00 SWITCH, SLIDE

S1 1-554-066-00 ⚠ SWITCH, SEESAW

S301 1-554-145-00 ⚠ SWITCH, ROCKER

1pc 1-556-371-00 ⚠ CORD, POWER

FRAME

Ref.No. or Q'ty	Part No.	Description
(FRAME)		
CN041F (for BVH-2180PS), 364F (for 02/12/04/14 model), 301F (to MB-14 board), 304F (to MB-14 board), 107F,350F,352F,606F, 612F,657F,807F,809F, 903F,915F,921F	() 1-561-056-00 () 1-560-298-00	PLUG,HOUSING,12P CONTACT,FEMALE
CN101F (to FV-01 board), 201F (to VV-01 board), 303F (to AC-39 board), 601F (to FV-02 board), 913F	() 1-561-069-00 () 1-561-067-00	PLUG,HOUSING,2P CONTACT,FEMALE
CN304M (to AC-39 board)	() 1-561-069-00 () 1-561-068-00	PLUG,HOUSING,2P CONTACT,MALE
CN312F (to AC-39 board)	() 1-561-070-00 () 1-561-067-00	PLUG,HOUSING,4P CONTACT,FEMALE
CN929F () 1-561-070-00 () 1-561-067-00	⚠ PLUG,HOUSING,4P ⚠ CONTACT,FEMALE	
CN302M (to AC-39 board)	() 1-561-070-00 () 1-561-068-00	PLUG,HOUSING,4P CONTACT,MALE
CN103F (to CA-09 board), 117F,207F,209F	() 1-561-071-00 1-535-206-00	PLUG,HOUSING,6P CONTACT,FEMALE
CN208F,911F,912F	() 1-561-071-00 () 1-561-067-00	PLUG,HOUSING,6P CONTACT,FEMALE
CN914F () 1-561-072-00 () 1-561-067-00		PLUG,HOUSING,9P CONTACT,FEMALE
CN922M () 1-561-072-00 () 1-561-068-00		PLUG,HOUSING,9P CONTACT,MALE

Ref.No. or Q'ty	Part No.	Description
(FRAME)		
CN929M () 1-561-084-00 () 1-561-068-00		PLUG,HOUSING,4P CONTACT,MALE
CN671F,672F,673F,674F, 675F,676F,677F,678F, 679F,680F,681F,682F, 683F,684F,685F,686F, 687F,688F	1-561-781-21	RECEP,BNC
CN104F (to CA-09 board), 308F (to AC-39 board), 116F () 1-561-828-00 () 1-561-067-00		PLUG,HOUSING,3P CONTACT,FEMALE
CN301M (to AC-39 board)	() 1-561-828-00 () 1-561-068-00	PLUG,HOUSING,3P CONTACT,MALE
CN924F () 1-561-857-00 () 1-560-761-00		PLUG,HOUSING,11P CONTACT,FEMALE
CN927F () 1-561-858-00 () 1-560-761-00		PLUG,HOUSING,17P CONTACT,FEMALE
CN306F (to AC-39 board), 307F (to AC-39 board), 321F,904F	() 1-561-863-00 () 1-561-067-00	PLUG,HOUSING,5P CONTACT,FEMALE
CN701F 1-561-888-00 () 1-560-768-00		PLUG,HOUSING,10P CONTACT,FEMALE
CN317F () 1-561-890-00 () 1-560-767-00 () 1-560-768-00		PLUG,HOUSING,20P CONTACT,FEMALE for AWG22-24 CONTACT,FEMALE for AWG24-28
CN101F (to CA-09 board), 111F () 1-561-890-00 () 1-560-768-00		PLUG,HOUSING,20P CONTACT,FEMALE

Ref.No. or Q'ty	Part No.	Description
(FRAME)		
CN314F	() 1-561-892-00 () 1-560-767-00 () 1-560-768-00	PLUG, HOUSING, 30P CONTACT, FEMALE for AWG22-24 CONTACT, FEMALE for AWG24-28
CN325F	() 1-561-892-00 () 1-560-768-00	PLUG, HOUSING, 30P CONTACT, FEMALE
CN203F (to RA-05 board), 010F	() 1-561-893-00 () 1-560-768-00	PLUG, HOUSING, 34P CONTACT, FEMALE
CN902F	() 1-561-893-00 () 1-560-767-00 () 1-560-768-00	PLUG, HOUSING, 34P CONTACT, FEMALE for AWG22-24 CONTACT, FEMALE for AWG24-28
CN322F	() 1-561-894-00 () 1-560-767-00 () 1-560-768-00	PLUG, HOUSING, 40P CONTACT, FEMALE for AWG22-24 CONTACT, FEMALE for AWG24-28
CN313F	() 1-561-895-00 () 1-560-768-00	PLUG, HOUSING, 50P CONTACT, FEMALE
CN901F	() 1-561-895-00 () 1-560-767-00 () 1-560-768-00	PLUG, HOUSING, 50P CONTACT, FEMALE for AWG22-24 CONTACT, FEMALE for AWG24-28
CN326F	() 1-561-896-00 () 1-560-768-00	PLUG, HOUSING, 60P CONTACT, FEMALE
1pc	1-933-205-00	FLAT CABLE ASSY, "DSH-1", 60P
Includes CN316F & 667F.		
1pc (for 02/12/04/14 model)	1-933-206-00	COAXIAL CABLE ASSY, "CCH-1"
Includes CN264F, 266F, 268F, 270F, 272F, 307F, 308F, 309F, 310F, 311F & 312F.		

Ref.No. or Q'ty	Part No.	Description
(FRAME)		
1pc	1-933-220-00	FLAT CABLE ASSY, "CPH-2", 26P
Includes CN324F & 702F.		
1pc	() 1-933-221-00	FLAT CABLE ASSY, "DSH-2", 60P
Includes CN315F, 601F, 651F, 668F & 821F.		
1pc	1-933-222-00	FLAT CABLE ASSY, "ASH-1", 34P
Includes CN261F, 323F, 385F & 810F.		
1pc (for 00/10 model)	1-933-561-00	COAXIAL CABLE ASSY "CCH-2"
Includes CN264F, 266F, 268F, 270F, 307F, 308F, 311 & 312.		
H1	8-825-725-10	HEAD, VIDEO/SYNC ERASE, EF204-5102
H2 (for 00/10/02/12 model)	8-825-725-50	HEAD, AUDIO ERASE, EF204-5104B
H2 (for 04/14 model)	8-825-725-70	HEAD, AUDIO ERASE, EF204-5105A
H3 (for 00/02/10/12 model)	8-825-771-01	HEAD PA77-5104F
H4 (for 02/12 model)	8-825-771-01	HEAD PA77-5104F
H3 (for 04/14 model)	8-825-737-60	HEAD, AUDIO R/P, PA77-5105B
H4 (for 04/14 model)	8-825-737-70	HEAD, AUDIO MONITOR, PA77-5105C
M3	8-838-028-01	MOTOR, DC, S-REEL, BHF-2200A

FRAME, ACCESSORIES

Ref.No. or Qty	Part No.	Description
(FRAME)		
M4	8-838-028-11	MOTOR,DC,T-REEL, BHF-2200B
M5	8-838-029-01	MOTOR,DC,CAPSTAN, BHF-2300A

Ref.No. or Qty	Part No.	Description
<u>ACCESSORIES SUPPLIED (BVH-2000PS,2180PS)</u>		
1pc	1-506-421-00	ADAPTOR,PLUG,PHONE
1pc	1-560-771-00	PLUG,D-SUB,37-PIN,MALE
1pc	1-560-772-00	PLUG,D-SUB,50-PIN,MALE
1pc	1-563-378-11	SHELL,METAL PLATING,D-SUB,37P
1pc	1-563-379-11	SHELL,METAL PLATING,D-SUB,50P
1pc	3-680-379-01	PC BOARD INDICATION PANEL
6pcs	7-682-578-04	SCREW,+B 5x16
6pcs	7-623-212-22	SPRING WASHER,M5
6pcs	7-688-005-03	WASHER,M5, SMALL
1pc	commercially available REEL,EMPTY,R1-11V (for 2000) REEL,EMPTY,R1-14V (for 2180)	
1pc	A-6001-005-A	EXTENSION BOARD,EB-10 (This assembly includes the following parts.)
R3	1-247-115-00	RES,CARBON 220 5% 1/4W
R1,2	1-247-126-00	RES,CARBON 620 5% 1/4W
1pc	1-508-892-00	CONNECTOR,PCB, 100P
178pcs	() 3-657-235-00	TERMINAL,TP
6pcs	7-621-981-15	SCREW,PSW2.6x6
4pcs	7-684-023-04	NUT,M3
4pcs	7-686-448-01	SCREW,PS3x8
D2	8-719-913-50	LED,GL3PG5,GRN
D3	8-719-930-33	LED,GL3PR3,RED
D1	8-719-930-53	LED,GL3HY3,YEL
1pc	() A-6030-052-A	STOPPER ASSY,PC BOARD

Ref.No. or Q'ty	Part No.	Description
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(OPTIONAL FIXTURE)

7-721-050-63	SCREWDRIVER, TOTSU, 3mm
7-721-050-64	SCREWDRIVER, TOTSU, 4mm
J-6040-160-A	PLATE, FLAT
J-6040-460-A	SCREW, TAPERED
This part contains two screws.	
J-6250-800-A	ADJUSTMENT GAUGE, DRUM ECCENTRICITY
J-6041-640-A	TENSION SCALE, 5kg
J-6041-670-A	THICKNESS GAUGE
J-6043-120-B	TENSION ADJUSTMENT TOOL
J-6043-380-A	CARRYING CASE

AP Products Incorporated
P.O.BOX 697,72 Corwin Drive
Painesville, Ohio 44077, USA
TEL: (216) 354-2101

When using the following fixture, contact
your Sony service office.
J-6043-870-A GUIDE FLANGE FIXTURE
(This fixture includes the following spacer.)
J-6044-000-A SPACER

DEMAGNETIZER, SONY HE-4

7-700-751-02	NIJT DRIVER, 5.5mm
7-700-766-02	SCREWDRIVER, HEX, 1.4mm
7-700-766-03	SCREWDRIVER, HEX, 2mm
7-700-766-04	SCREWDRIVER, HEX, 2.5mm

SECTION E CHANGED PARTS

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UP TO #33399 (BVH-2000PS)

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#33401 & UP (BVH-2000PS)

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MB-14A BOARD (BVH-2000PS,2180PS/CARD RACK)

CN402M,403M

1-560-309-00 RECEP,3P,MALE.....1-560-300-00 RECEP,3P,MALE

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UP TO #33499 (BVH-2000PS)

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#33501 & UP (BVH-2000PS)

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MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)

C507 NOT IN USE.....1-107-158-00 CAP,MICA 30PF 5% 500V

C510 1-107-158-00 CAP,MICA 30PF 5% 500V.....DELETED

D31,32,33,34,35,36

NOT IN USE.....8-719-101-98 DIODE 1SS97

IC8 8-759-100-91 IC UPC91A.....DELETED

L1,2,3,4

1-407-169-XX INDUCTOR,MICRO,100 5%.....1-408-421-00 INDUCTOR,MICRO,100 5%

L5,6 1-409-339-00 COIL,SN.....1-421-329-00 COIL,CHOKE

L11 1-407-169-00 INDUCTOR,MICRO,100 5%.....1-408-421-00 INDUCTOR,MICRO,100 5%

L15 1-409-339-00 COIL,SN.....1-421-329-00 COIL,CHOKE

R301,302

NOT IN USE.....1-215-437-00 RES,METAL 4.7K 1% 1/6W

RV10,18

1-230-144-00 RES,VAR,COMP 1K(B).....1-230-739-11 RES,VAR,CARBON 1K

TP1,2,3,4,5,6,7,8,9,10

3-673-805-01 TERMINAL,TP.....3-657-703-01 TERMINAL,TP

CD-17 BOARD (BVH-2000PS,2180PS/CARD RACK)

C49 1-108-595-00 CAP,MYLAR 0.047 5% 50V.....DELETED

C12,62 1-247-879-00 RES,CARBON 100K 5% 1/6W.....DELETED

CHANGED PARTS

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UP TO #33599 (BVH-2000PS)

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#33601 & UP (BVH-2000PS)

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MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)

R514 1-247-807-00 RES,CARBON 100 5% 1/6W.....1-247-814-00 RES,CARBON 200 5% 1/6W

SY-79 BOARD (BVH-2000PS,2180PS/CARD RACK)

IC1C	8-759-762-55	IC, EPROM, MBM2732-76U3-3.....8-759-764-20	IC, EPROM, MBM2732-76U3-4
IC1D	8-759-761-32	IC, EPROM, MBM2732-75U3-2.....8-759-764-19	IC, EPROM, MBM2732-75U3-3
IC1E	8-759-762-54	IC, EPROM, MBM2732-74U3-2.....8-759-764-18	IC, EPROM, MBM2732-74U3-3
IC1G	8-759-761-30	IC, EPROM, MBM2732-73U3-3.....8-759-764-17	IC, EPROM, MBM2732-73U3-4
IC1I	8-759-761-34	IC, EPROM, MBM2732-71 A3-1.....8-759-764-15	IC, EPROM, MBM2732-71 A3-2
IC1K	8-759-762-53	IC, EPROM, MBM2732-70U3-3.....8-759-764-13	IC, EPROM, MBM2732-70U3-4

SY-80 BOARD (BVH-2000PS,2180PS/CARD RACK)

IC1C	8-759-762-58	IC, EPROM, MBM2732-82U3-2.....8-759-764-23	IC, EPROM, MBM2732-82U3-3
IC1D	8-759-762-57	IC, EPROM, MBM2732-81 U3-4.....8-759-764-22	IC, EPROM, MBM2732-81 U3-5
IC1F	8-759-762-56	IC, EPROM, MBM2732-80U3-3.....8-759-764-21	IC, EPROM, MBM2732-80U3-4

RA-05 BOARD (BVH-2000PS,2180PS/TTP)

R55 1-247-839-00 RES,CARBON 2.2K 5% 1/6W.....1-247-847-00 RES,CARBON 4.7K 5% 1/6W

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UP TO #33699 (BVH-2000PS)

UP TO #10099 (BVH-2180PS)

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#33701 & UP (BVH-2000PS)

#10101 & UP (BVH-2180PS)

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SV-43 BOARD (BVH-2000PS,2180PS/CARD RACK)

(for BVH-2180PS)

IC1E	8-759-765-12	IC, EPROM, MBM2732-S1Q1-1.....8-759-765-69	IC, EPROM, MBM2732-S1Q1-2
IC6I	8-759-764-35	IC, EPROM, MBM2732-S7Q1.....8-759-765-48	IC, EPROM, MBM2732-S7Q1-2

RP-09 BOARD (BVH-2000PS,2180PS/TTP)

IC2,4 8-741-115-60 IC BX1156.....8-741-115-62 IC BX1156B

CHANGED PARTS

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UP TO #33799 (BVH-2000PS)

UP TO #10199 (BVH-2180PS)

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#33801 & UP (BVH-2000PS)

#10201 & UP (BVH-2180PS)

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DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

1pc	NOT IN USE.....	A-6026-048-A	MOUNT PCB,DM-51
4pcs	NOT IN USE.....	4-812-134-11	RIVET NYLON,3.5
C30	1-123-379-00	CAP,ELECT 0.47 100V.....	1-124-253-00 CAP,ELECT 0.47 50V
C33	1-123-381-00	CAP,ELECT 2.2 100V.....	1-124-257-00 CAP,ELECT 2.2 50V
C37	1-108-573-00	CAP,MYLAR 0.0056 5% 50V.....	DELETED
C38	1-108-567-00	CAP,MYLAR 0.0033 5% 50V.....	DELETED
C39	1-108-585-00	CAP,MYLAR 0.018 5% 50V.....	1-130-486-00 CAP,MYLAR 0.018 5% 50V
C40	1-109-528-00	CAP,MICA 51PF 5% 100V.....	DELETED
C41	1-109-535-00	CAP,MICA 100PF 5% 100V.....	DELETED
C42	1-108-561-00	CAP,MYLAR 0.0018 5% 50V.....	DELETED
C43	1-108-563-00	CAP,MYLAR 0.0022 5% 50V.....	1-130-475-00 CAP,MYLAR 0.0022 5% 50V
C46	1-109-540-00	CAP,MICA 180PF 5% 100V.....	DELETED
C47	1-109-528-00	CAP,MICA 51PF 5% 100V.....	DELETED
C50	1-108-567-00	CAP,MYLAR 0.0033 5% 50V.....	DELETED
C54	1-108-587-00	CAP,MYLAR 0.022 5% 50V.....	1-130-487-00 CAP,MYLAR 0.022 5% 50V
C56	1-109-539-00	CAP,MICA 150PF 5% 100V.....	1-107-209-00 CAP,MICA 20PF 5% 500V
C96,97,108	1-123-330-00	CAP,ELECT 22 25V.....	1-124-234-00 CAP,ELECT 22 16V
C140	1-123-379-00	CAP,ELECT 0.47 100V.....	1-124-253-00 CAP,ELECT 0.47 50V
C143	1-108-555-00	CAP,MYLAR 0.001 5% 50V.....	DELETED
C152	NOT IN USE.....	1-124-234-00	CAP,ELECT 22 16V
C501,502	NOT IN USE.....	1-161-907-00	CAP,CERAMIC 0.0012 5% 50V
C503	NOT IN USE.....	1-109-541-00	CAP,MICA 200PF 5% 100V
C504	NOT IN USE.....	1-109-542-00	CAP,MICA 220PF 5% 100V
C505	NOT IN USE.....	1-130-471-00	CAP,MYLAR 0.001 5% 50V
C506	NOT IN USE.....	1-162-136-00	CAP,CERAMIC 0.01 50V
C507	NOT IN USE.....	1-109-542-00	CAP,MICA 220PF 5% 100V
C508	NOT IN USE.....	1-162-136-00	CAP,CERAMIC 0.01 50V
C509	NOT IN USE.....	1-109-530-00	CAP,MICA 62PF 5% 100V
C510	NOT IN USE.....	1-109-541-00	CAP,MICA 200PF 5% 100V
C511	NOT IN USE.....	1-109-542-00	CAP,MICA 220PF 5% 100V
C512	NOT IN USE.....	1-162-136-00	CAP,CERAMIC 0.01 50V
C513	NOT IN USE.....	1-109-541-00	CAP,MICA 200PF 5% 100V
C514	NOT IN USE.....	1-162-136-00	CAP,CERAMIC 0.01 50V
C515	NOT IN USE.....	1-124-257-00	CAP,ELECT 2.2 50V
C516	NOT IN USE.....	1-130-472-00	CAP,MYLAR 0.0012 5% 50V

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UP TO #33799 (BVH-2000PS)

UP TO #10199 (BVH-2180PS)

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#33801 & UP (BVH-2000PS)

#10201 & UP (BVH-2180PS)

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(DM-25 BOARD BVH-2000PS,2180PS/CARD RACK)

C517,518

NOT IN USE.....1-162-136-00 CAP,CERAMIC 0.01 50V

C519,520

NOT IN USE.....1-130-477-00 CAP,MYLAR 0.0033 5% 50V

CN6A

NOT IN USE.....1-564-929-11 CONNECTOR,PCB,14P

CN8E,9A

NOT IN USE.....1-564-930-11 CONNECTOR,PCB,16P

IC1A

8-759-900-10 IC SN74LS10N,TTL.....DELETED

IC4A,4D

8-759-902-21 IC SN74LS221N,TTL.....DELETED

IC5A

8-759-901-23 IC SN74LS123N,TTL.....DELETED

IC5B

8-759-900-00 IC SN74LS00N,TTL.....DELETED

IC6B

NOT IN USE.....8-759-900-10 IC SN74LS10N,TTL

IC6C,6D,6E,7B,7C

NOT IN USE.....8-759-902-21 IC SN74LS221N,TTL

IC7D

NOT IN USE.....8-759-900-74 IC SN74LS74AN,TTL

IC7E

NOT IN USE.....8-759-901-23 IC SN74LS123N,TTL

IC8B

NOT IN USE.....8-759-900-74 IC SN74LS74AN,TTL

IC8C,8D,9B

NOT IN USE.....8-759-900-00 IC SN74LS00N,TTL

IC9E

NOT IN USE.....8-759-902-21 IC SN74LS201N,TTL

R30

1-214-165-00 RES,METAL 24K 1% 1/4W.....DELETED

R34

1-247-866-00 RES,CARBON 30K 5% 1/6W.....DELETED

R36

1-247-867-00 RES,CARBON 33K 5% 1/6W.....DELETED

R52

1-247-878-00 RES,CARBON 91K 5% 1/6W.....DELETED

R53

1-247-879-00 RES,CARBON 100K 5% 1/6W.....DELETED

R54

1-247-831-00 RES,CARBON 1K 5% 1/6W.....DELETED

R56

1-247-838-00 RES,CARBON 2K 5% 1/6W.....DELETED

R59

1-214-160-00 RES,METAL 15K 1% 1/4W.....1-214-149-00 RES,METAL 5.1K 1% 1/4W

R62

1-247-850-00 RES,CARBON 6.2K 5% 1/6W.....1-247-838-00 RES,CARBON 2K 5% 1/6W

R63

1-247-863-00 RES,CARBON 22K 5% 1/6W.....1-247-862-00 RES,CARBON 20K 5% 1/6W

R193

1-247-831-00 RES,CARBON 1K 5% 1/6W.....DELETED

R208

1-247-870-00 RES,CARBON 43K 1/6W.....DELETED

R501

NOT IN USE.....1-215-464-00 RES,METAL 62K 1% 1/6W

R502

NOT IN USE.....1-215-455-00 RES,METAL 27K 1% 1/6W

R503

NOT IN USE.....1-215-460-00 RES,METAL 43K 1% 1/6W

R504

NOT IN USE.....1-215-454-00 RES,METAL 24K 1% 1/6W

R505

NOT IN USE.....1-215-466-00 RES,METAL 75K 1% 1/6W

CHANGED PARTS

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UP TO #33799 (BVH-2000PS)
UP TO #10199 (BVH-2180PS)
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#33801 & UP (BVH-2000PS)
#10201 & UP (BVH-2180PS)
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(DM-25 BOARD BVH-2000PS,2180PS/CARD RACK)

R506	NOT IN USE.....	1-215-448-00	RES,METAL 13K 1% 1/6W
R507	NOT IN USE.....	1-215-456-00	RES,METAL 30K 1% 1/6W
R508	NOT IN USE.....	1-215-460-00	RES,METAL 43K 1% 1/6W
R509	NOT IN USE.....	1-215-448-00	RES,METAL 13K 1% 1/6W
R510	NOT IN USE.....	1-215-460-00	RES,METAL 43K 1% 1/6W

R511,512	NOT IN USE.....	1-215-469-00	RES,METAL 100K 1% 1/6W
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R513,514,515,516	NOT IN USE.....	1-215-445-00	RES,METAL 10K 1% 1/6W
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R517	NOT IN USE.....	1-215-469-00	RES,METAL 100K 1% 1/6W
R518	NOT IN USE.....	1-215-445-00	RES,METAL 10K 1% 1/6W
R519	NOT IN USE.....	1-215-457-00	RES,METAL 33K 1% 1/6W

RV501	NOT IN USE.....	1-228-474-00	RES,VAR,CERMET 10K
RV502	NOT IN USE.....	1-228-473-00	RES,VAR,CERMET 5K
RV503	NOT IN USE.....	1-228-474-00	RES,VAR,CERMET 10K

TP501,502,503,504,505,506	NOT IN USE.....	2-296-824-01	TERMINAL,TP
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TPE1	3-673-805-11	TERMINAL,TP.....	DELETED
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MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)

L5,6,15	1-421-329-00	COIL,CHOKE.....	1-421-370-00	COIL,CHOKE
R65	1-247-791-00	RES,CARBON 22 5% 1/6W.....	1-247-807-00	RES,CARBON 100 5% 1/6W

LG-02(A) BOARD (BVH-2000PS,2180PS/CARD RACK)

L1	1-421-329-00	COIL,CHOKE.....	1-421-370-00	COIL,CHOKE
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SR-15 BOARD (BVH-2000PS,2180PS/CARD RACK)

L2,3,4	1-421-329-00	COIL,CHOKE.....	1-421-370-00	COIL,CHOKE
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UP TO #33799 (BVH-2000PS)

UP TO #10199 (BVH-2180PS)

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=====

#33801 & UP (BVH-2000PS)

#10201 & UP (BVH-2180PS)

=====

DT-05 BOARD (BVH-2000PS,2180PS/CARD RACK)

L1 1-421-329-00 COIL,CHOKE.....1-421-370-00 COIL,CHOKE

DD-03 BOARD (BVH-2000PS-02,04/2180PS-02,04)

1pc (for 02/04 model)

A-6023-035-A COMPLETE PCB,DD-03.....A-6023-035-B COMPLATE PCB,DD-03

C16 NOT IN USE.....1-130-483-00 CAP,MYLAR 0.01 5% 50V

D9 NOT IN USE.....8-719-911-19 DIODE 1SS119

IC3 NOT IN USE.....8-759-245-39 IC TC4539BP,CMOS

R7 1-247-855-00 RES,CARBON 10K 5% 1/6W.....1-247-839-00 RES,CARBON 2.2K 5% 1/6W

R8 1-247-855-00 RES,CARBON 10K 5% 1/6W.....1-247-879-00 RES,CARBON 100K 5% 1/6W

R16 NOT IN USE.....1-247-871-00 RES,CARBON 47K 5% 1/6W

Q18 8-729-178-54 TRANSISTOR 2SC2785.....8-729-900-89 TRANSISTOR DTC144ES

Q19 NOT IN USE.....8-729-900-89 TRANSISTOR DTC144ES

RA-05 BOARD (BVH-2000PS,2180PS/TTP)

6pcs NOT IN USE.....7-623-208-22 SPRING WASHER,M2

6pcs NOT IN USE.....7-682-657-01 SCREW,+PS 3x40

6pcs NOT IN USE.....7-684-023-04 NUT,M3

12pcs 7-686-450-01 SCREW,PS 3x12.....DELETED

CHANGED PARTS

=====

UP TO #33899 (BVH-2000PS)
UP TO #10299 (BVH-2180PS)

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=====

#33901 & UP (BVH-2000PS)
#10301 & UP (BVH-2180PS)

=====

SV-43 BOARD (BVH-2000PS,2180PS/CARD RACK)

(for BVH-2000PS)

IC6I	8-759-764-38	IC, EPROM, MBM2732-S7U3-7.....	8-759-765-47	IC, EPROM, MBM2732-S7U3-8
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UP TO #33999 (BVH-2000PS)

UP TO #10399 (BVH-2180PS)

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=====

#34001 & UP (BVH-2000PS)

#10401 & UP (BVH-2180PS)

=====

SL-07 BOARD (BVH-2000PS-02,04/BVH-2180PS-02,04)

1pc A-6026-023-A MOUNTED PCB,SL-07.....A-6026-023-B MOUNTED PCB,SL-07

SL-08 BOARD (BVH-2000PS-02,04/BVH-2180PS-02,04)

1pc A-6079-428-A MOUNTED PCB,SL-08.....A-6079-428-B MOUNTED PCB,SL-08

SL-09 BOARD (BVH-2000PS-02,04/BVH-2180PS-02,04)

1pc A-6079-429-B MOUNTED PCB,SL-09.....A-6079-429-C MOUNTED PCB,SL-09

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UP TO #34099 (BVH-2000PS)

#10399 (BVH-2180PS)

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=====

#34101 & UP (BVH-2000PS)

#10401 & UP (BVH-2180PS)

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SR-15 BOARD (BVH-2000PS,2180PS/CARD RACK)

R67 1-247-847-00 RES,CARBON 4.7K 5% 1/6W.....1-247-846-00 RES,CARBON 4.3K 5% 1/6W

=====

UP TO #34199 (BVH-2000PS)

UP TO #10399 (BVH-2180PS)

=====

=====

#34201 & UP (BVH-2000PS)

#10401 & UP (BVH-2180PS)

=====

DT-05 BOARD (BVH-2000PS,2180PS/CARD RACK)

R39 1-214-143-00 RES,METAL 3K 1% 1/4W.....1-214-136-00 RES,METAL 1.5K 1% 1/4W

R146 1-247-859-00 RES,CARBON 15K 5% 1/6W.....1-247-873-00 RES,CARBON 56K 5% 1/6W

R147 NOT IN USE.....1-249-432-11 RES,CARBON 18K 5% 1/6W

=====

UP TO #34299 (BVH-2000PS)

UP TO #10499 (BVH-2180PS)

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=====

#34301 & UP (BVH-2000PS)

#10501 & UP (BVH-2180PS)

=====

AP-12 BOARD (BVH-2000PS,2180PS)

IC501,601,602,603,604,

605 8-759-700-04 IC NJM2043D-D.....8-759-602-01 IC M5220P

D507 NOT IN USE.....8-719-930-33 LED,GL3PR3,RED

CHANGED PARTS

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UP TO #34599 (BVH-2000PS)	
UP TO #10599 (BVH-2180PS)	

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=====

#34601 & UP (BVH-2000PS)	
#10601 & UP (BVH-2180PS)	

=====

DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

C523 NOT IN USE.....1-162-306-31 CAP,CERAMIC 0.01 30% 16V

=====

UP TO #34699 (BVH-2000PS)	
UP TO #10599 (BVH-2180PS)	

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=====

#34701 & UP (BVH-2000PS)	
#10601 & UP (BVH-2180PS)	

=====

EQ-02 BOARD (BVH-2000PS,2180PS/CARD RACK)

(EQ-11 BOARD)

S2 1-553-510-00 SWITCH,SLIDE.....1-570-374-11 SWITCH,SLIDE

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UP TO #34799 (BVH-2000PS)	
UP TO #10699 (BVH-2180PS)	

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=====

#34801 & UP (BVH-2000PS)	
#10701 & UP (BVH-2180PS)	

=====

EQ-02 BOARD (BVH-2000PS,2180PS/CARD RACK)

C127 1-107-202-00 CAP,MICA 10PF 5% 500V.....1-107-078-00 CAP,MICA 51PF 5% 50V

R211,220

1-215-445-00 RES,METAL 10K 1% 1/6W.....1-215-441-00 RES,METAL 6.8K 1% 1/6W

RV26 1-224-941-00 RES,VAR,METAL 20K.....1-224-942-00 RES,VAR,METAL 50K

R229 1-247-888-00 RES,CARBON 240K 5% 1/6W.....1-247-889-00 RES,CARBON 270K 5% 1/6W

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UP TO #34899 (BVH-2000PS)	
UP TO #10599 (BVH-2180PS)	

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=====

#34901 & UP (BVH-2000PS)	
#10601 & UP (BVH-2180PS)	

=====

CD-17 BOARD (BVH-2000PS,2180PS/CARD RACK)

C70 1-130-487-00 CAP,MYLAR 0.022 5% 50V.....DELETED

R56 1-247-847-00 RES,CARBON 4.7K 5% 1/6W.....1-215-441-00 RES,METAL 6.8K 1% 1/6W

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UP TO #34899 (BVH-2000PS)

UP TO #10699 (BVH-2180PS)

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=====

#34901 & UP (BVH-2000PS)

#10701 & UP (BVH-2180PS)

=====

AE-03 BOARD (BVH-2000PS,2180PS/CARD RACK)

C148	1-109-527-00	CAP,MICA 47PF 5% 100V.....	1-107-077-00	CAP,MICA 47PF 5% 50V
C150	1-109-531-00	CAP,MICA 68PF 5% 100V.....	1-107-081-00	CAP,MICA 68PF 5% 50V
C33	1-109-553-00	CAP,MICA 470PF 5% 100V.....	1-130-467-00	CAP,MYLAR 470PF 5% 50V
C149	1-109-555-00	CAP,MICA 560PF 5% 100V.....	1-130-468-00	CAP,MYLAR 560PF 5% 50V
C44	1-109-559-00	CAP,MICA 820PF 5% 100V.....	1-130-470-50	CAP,MYLAR 820PF 5% 50V
R128	1-214-105-00	RES,METAL 75 1% 1/4W.....	1-215-394-00	RES,METAL 75 1% 1/6W
R246	1-214-106-00	RES,METAL 82 1% 1/4W.....	1-215-395-00	RES,METAL 82 1% 1/6W
R274	1-214-122-00	RES,METAL 390 1% 1/4W.....	1-215-411-00	RES,METAL 390 1% 1/6W
R249	1-214-124-00	RES,METAL 470 1% 1/4W.....	1-215-413-00	RES,METAL 470 1% 1/6W
R273	1-214-125-00	RES,METAL 510 1% 1/4W.....	1-215-414-00	RES,METAL 510 1% 1/6W
R138	1-214-146-00	RES,METAL 3.9K 1% 1/4W.....	1-215-435-00	RES,METAL 3.9K 1% 1/6W
R119	1-214-153-00	RES,METAL 7.5K 1% 1/4W.....	1-215-442-00	RES,METAL 7.5K 1% 1/6W
R248	1-214-156-00	RES,METAL 10K 1% 1/4W.....	1-215-445-00	RES,METAL 10K 1% 1/6W
R21	1-247-863-00	RES,CARBON 22K 5% 1/6W.....	1-247-855-00	RES,CARBON 10K 5% 1/6W
R129	1-247-867-00	RES,CARBON 33K 5% 1/6W.....	1-247-866-00	RES,CARBON 30K 5% 1/6W

DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

C115	1-109-539-00	CAP,MICA 150PF 5% 100V.....	1-109-541-00	CAP,MICA 200PF 5% 100V
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SY-79 BOARD (BVH-2000PS,2180PS/CARD RACK)

C42	1-123-352-00	CAP,ELECT 1 50V.....	1-124-255-00	CAP,ELECT 1 20% 50V
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VM-01 BOARD (BVH-2000PS,2180PS/CN PNL)

C35	1-108-575-00	CAP,MYLAR 6800PF 5% 50V.....	1-108-587-00	CAP,MYLAR 0.022 5% 50V
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UP TO #34999 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35001 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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LA-02 BOARD (BVH-2000PS,2180PS/CN PNL)

TP102,202,302,402 (for 04,14)				
1-423-189-00	TRANSFORMER, INPUT.....	1-423-260-11	TRANSFORMER, INPUT	

AP-12 BOARD (BVH-2000PS,2180PS)

C116,216,316,416 (for 04,14)				
1-107-169-00	CAP,MICA 100PF 10% 50V.....	1-102-106-00	CAP,CERAMIC 100PF 10% 50V	

C521,522,523				
NOT IN USE	1-107-158-00	CAP,MICA 30PF 5% 500V		

BVH-2000PS

BVH-2180PS

CHANGED PARTS

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UP TO #34799 (BVH-2000PS)
UP TO #10699 (BVH-2180PS)

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=====

#34801 & UP (BVH-2000PS)
#10701 & UP (BVH-2180PS)

=====

CA-09 BOARD (BVH-2000PS,2180PS/TTP)

R138	1-247-831-00	RES,CARBON 1K 5% 1/6W.....	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
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DA-07 BOARD (BVH-2000PS,2180PS/TTP)

R51	1-247-831-00	RES,CARBON 1K 5% 1/6W.....	1-247-839-00	RES,CARBON 2.2K 5% 1/6W
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UP TO #34899 (BVH-2000PS)
UP TO #10699 (BVH-2180PS)

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=====

#34901 & UP (BVH-2000PS)
#10701 & UP (BVH-2180PS)

=====

EQ-02 BOARD (BVH-2000PS,2180PS/CARD RACK)

(EQ-11 BOARD)

R359	NOT IN USE.....	1-249-405-11	RES,CARBON 100 5% 1/6W
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UP TO #34999 (BVH-2000PS)
UP TO #10799 (BVH-2180PS)

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=====

#35001 & UP (BVH-2000PS)
#10801 & UP (BVH-2180PS)

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DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

R504	1-215-454-00	RES,METAL 24K 1% 1/6W.....	1-215-452-00	RES,METAL 20K 1% 1/6W
R506	1-215-448-00	RES,METAL 13K 1% 1/6W.....	1-215-449-00	RES,METAL 15K 1% 1/6W

CD-17 BOARD (BVH-2000PS,2180PS/CARD RACK)

C150	NOT IN USE.....	1-107-077-00	CAP,MICA 47PF 5% 50V
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UP TO #34999 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35001 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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AP-12 BOARD (BVH-2000PS,2180PS/TTP)

C521,522,523
NOT IN USE.....1-107-158-00 CAP,MICA 30PF 5% 500V

C116,216,316,416 (for 04,14)
1-107-169-00 CAP,MICA 100PF 5% 500V.....1-102-106-00 CAP,MICA 100PF 10% 50V

MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)

C504 NOT IN USE.....1-109-525-00 CAP,MICA 39PF 5% 100V

C507 1-107-158-00 CAP,MICA 30PF 5% 500V.....1-107-077-00 CAP,MICA 47PF 5% 50V

CV4 1-414-256-00 CAP,TRIMMER 20PF.....1-141-260-00 CAP,TRIMMER 60PF

L8 NOT IN USE.....1-407-186-XX INDUCTOR,MICRO 4.7 5%

L9 1-407-182-XX INDUCTOR,MICRO 2.2 5%.....1-407-186-XX INDUCTOR,MICRO 4.7 5%

R118 1-247-839-00 RES,CARBON 2.2K 5% 1/6W.....DELETED

R510 1-247-819-00 RES,CARBON 330 5% 1/6W.....DELETED

R112 1-247-807-00 RES,CARBON 100 5% 1/6W.....1-247-804-00 RES,CARBON 75 5% 1/6W

R121 1-247-804-00 RES,CARBON 75 5% 1/6W.....1-247-817-00 RES,CARBON 270 5% 1/6W

R530 NOT IN USE.....1-247-809-00 RES,CARBON 120 5% 1/6W

R531 NOT IN USE.....1-249-415-11 RES,CARBON 680 5% 1/6W

R532 NOT IN USE.....1-249-420-11 RES,CARBON 1.8K 5% 1/6W

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UP TO #35099 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35101 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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CD-17 BOARD (BVH-2000PS,2180PS/CARD RACK)

IC10,12 8-759-745-60 IC NJM4560D.....8-759-145-58 IC UPC4558C

DT-05 BOARD (BVH-2000PS,2180PS/CARD RACK)

TP1,2,3,4,5,6,7,8,9,10
3-657-703-01 TERMINAL,TP.....3-693-032-01 TERMINAL,TP

CHANGED PARTS

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UP TO #35099 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35101 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

=====

CA-09 BOARD (BVH-2000PS,2180PS/TTP)

R140,141

1-214-101-00 RES,METAL 51 1% 1/4W.....1-215-390-00 RES,METAL 51 1% 1/6W

R10 1-214-133-00 RES,METAL 1.1K 1% 1/4W.....1-215-422-00 RES,METAL 1.1K 1% 1/6W

R17 1-214-143-00 RES,METAL 3K 1% 1/4W.....1-215-432-00 RES,METAL 3K 1% 1/6W

R42,64 1-214-147-00 RES,METAL 4.3K 1% 1/4W.....1-215-436-00 RES,METAL 4.3K 1% 1/6W

R39,62 1-214-151-00 RES,METAL 6.2K 1% 1/4W.....1-215-440-00 RES,METAL 6.2K 1% 1/6W

R34,35,36,73,75,76,77

1-214-156-00 RES,METAL 10K 1% 1/4W.....1-215-445-00 RES,METAL 10K 1% 1/6W

R33 1-214-163-00 RES,METAL 20K 1% 1/4W.....1-215-452-00 RES,METAL 20K 1% 1/6W

R18,31 1-214-165-00 RES,METAL 24K 1% 1/4W.....1-215-454-00 RES,METAL 24K 1% 1/6W

R9 1-214-166-00 RES,METAL 27K 1% 1/4W.....1-215-455-00 RES,METAL 27K 1% 1/6W

R27 1-214-173-00 RES,METAL 51K 1% 1/4W.....1-215-462-00 RES,METAL 51K 1% 1/6W

DA-07 BOARD (BVH-2000PS,2180PS/TTP)

R29 1-214-086-00 RES,METAL 12 1% 1/4W.....1-215-375-31 RES,METAL 12 1% 1/6W

R80 1-214-133-00 RES,METAL 1.1K 1% 1/4W.....1-215-422-00 RES,METAL 1.1K 1% 1/6W

R24 1-214-147-00 RES,METAL 4.3K 1% 1/4W.....1-215-436-00 RES,METAL 4.3K 1% 1/6W

R54,55,56,57

1-214-156-00 RES,METAL 10K 1% 1/4W.....1-215-445-00 RES,METAL 10K 1% 1/6W

R82 1-214-166-00 RES,METAL 27K 1% 1/4W.....1-215-455-00 RES,METAL 27K 1% 1/6W

R10 1-214-167-00 RES,METAL 30K 1% 1/4W.....1-215-456-00 RES,METAL 30K 1% 1/6W

R7 1-214-169-00 RES,METAL 36K 1% 1/4W.....1-215-458-00 RES,METAL 36K 1% 1/6W

R8 1-214-170-00 RES,METAL 39K 1% 1/4W.....1-215-459-00 RES,METAL 39K 1% 1/6W

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UP TO #35099 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35101 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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RA-05 BOARD (BVH-2000PS,2180PS/TTP)

R34,35,69,70,190,191, 224,225	1-214-088-00	RES,METAL 15 1% 1/4W.....	1-215-377-00	RES,METAL 15 1% 1/6W
R53,54,56,231,232,233	1-214-096-00	RES,METAL 33 1% 1/4W.....	1-215-385-00	RES,METAL 33 1% 1/6W
R139,145,299,304	1-214-116-00	RES,METAL 220 1% 1/4W.....	1-215-405-00	RES,METAL 220 1% 1/6W
R143,149,298,308,	1-214-125-00	RES,METAL 510 1% 1/4W.....	1-215-414-00	RES,METAL 510 1% 1/6W
R290	1-214-133-00	RES,METAL 1.1K 1% 1/4W.....	1-215-422-00	RES,METAL 1.1K 1% 1/6W
R36,37,39,40,41,42, 196,197,198,199,201, 202	1-214-139-00	RES,METAL 2K 1% 1/4W.....	1-215-428-00	RES,METAL 2K 1% 1/6W
R52,236	1-214-144-00	RES,METAL 3.3K 1% 1/4W.....	1-215-433-00	RES,METAL 3.3K 1% 1/6W
R126,254	1-214-146-00	RES,METAL 3.9K 1% 1/4W.....	1-215-435-00	RES,METAL 3.9K 1% 1/6W
R18,19,20,183,184,185	1-214-148-00	RES,METAL 4.7K 1% 1/4W.....	1-215-437-00	RES,METAL 4.7K 1% 1/6W
R140,141,144,146,300, 301,303,305	1-214-151-00	RES,METAL 6.2K 1% 1/4W.....	1-215-440-00	RES,METAL 6.2K 1% 1/6W
R13,14,15,180,181,182	1-214-154-00	RES,METAL 8.2K 1% 1/4W.....	1-215-443-00	RES,METAL 8.2K 1% 1/6W
R58,74,105,109,114, 120,125,152,155,230, 245,258,260,263,266, 267,296,297	1-214-156-00	RES,METAL 10K 1% 1/4W.....	1-215-445-00	RES,METAL 10K 1% 1/6W
R77,115,228,256	1-214-158-00	RES,METAL 12K 1% 1/4W.....	1-215-447-00	RES,METAL 12K 1% 1/6W
R76,229	1-214-160-00	RES,METAL 15K 1% 1/4W.....	1-215-449-00	RES,METAL 15K 1% 1/6W
R117,259	1-214-162-00	RES,METAL 18K 1% 1/4W.....	1-215-451-00	RES,METAL 18K 1% 1/6W

CHANGED PARTS

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UP TO #35099 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35101 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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(RA-05 BOARD BVH-2000PS,2180PS/TTP)

R16,17,22,163,164,166

1-214-164-00 RES,METAL 22K 1% 1/4W.....1-215-453-00 RES,METAL 22K 1% 1/6W

R293 1-214-166-00 RES,METAL 27K 1% 1/4W.....1-215-455-00 RES,METAL 27K 1% 1/6W

R116,255

1-214-170-00 RES,METAL 39K 1% 1/4W.....1-215-459-00 RES,METAL 39K 1% 1/6W

R21,113,142,147,165,

302,306,311

1-214-180-00 RES,METAL 100K 1% 1/4W.....1-215-469-00 RES,METAL 100K 1% 1/6W

R79,215 1-214-175-00 RES,METAL 62K 1% 1/4W.....1-215-464-00 RES,METAL 62K 1% 1/6W

LG-02(A) BOARD (BVH-2000PS,2180PS/CARD RACK)

IC1A NOT IN USE.....8-759-900-08 IC SN74LS08N

BE-03 BOARD (BVH-2000PS,2180PS/TTP)

C20,21,22,23

1-108-603-00 CAP,MYLAR 0.1 5% 50V.....1-130-495-00 CAP,MYLAR 0.1 5% 50V

MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)

R19,20 1-247-211-00 RES,CARBON 62 5% 1/2W.....1-214-835-00 RES,METAL 62 1% 1/2W

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UP TO #34799 (BVH-2000PS)

UP TO #10699 (BVH-2180PS)

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=====

#34801 & UP (BVH-2000PS)

#10701 & UP (BVH-2180PS)

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SV-43 BOARD (BVH-2000PS,2180PS/CARD RACK)

(BVH-2000PS)

IC1E 8-759-764-37 IC, EPROM, MBM2732-S1U3-7.....8-759-769-76 IC, EPROM, MBM2732-S1U3-9

(BVH-2180PS)

IC1E 8-759-765-69 IC, EPROM, MBM2732-S1Q1-2.....8-759-769-77 IC, EPROM, MBM2732-S1Q1-3

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UP TO #34999 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35001 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

R519 1-215-457-00 RES, METAL 33K 1% 1/6W.....1-215-462-00 RES, METAL 51K 1% 1/6W

R517 1-215-469-00 RES, METAL 100K 1% 1/6W.....1-215-474-00 RES, METAL 160K 1% 1/6W

=====

UP TO #35199 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35201 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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CONNECTOR PANEL ASSY (BVH-2000PS,2180PS)

1pc 3-673-859-02 LABEL, CONNECTOR.....3-673-859-04 LABEL, CONNECTOR

1pc 3-693-059-01 LABEL (NS) CONNECTOR.....3-693-059-02 LABEL (NS) CONNECTOR

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UP TO #35299 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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=====

#35301 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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E0-02 BOARD (BVH-2000PS,2180PS/CARD RACK)

(E0-11 BOARD)

CN1 1-564-929-11 PLUG, DIL 14P.....1-566-087-11 PLUG, DIL 14P

CN2 1-564-928-11 PLUG, DIL 8P.....1-566-086-11 PLUG, DIL 8P

AE-03 BOARD (BVH-2000PS,2180PS/CARD RACK)

R90,92 1-247-863-00 RES, CARBON 22K 5% 1/6W.....1-249-429-11 RES, CARBON 10K 5% 1/6W

C55 1-136-156-00 RES, FILM 0.018 5% 50V.....1-136-160-00 CAP, FILM 0.039 5% 50V

=====

UP TO #35399 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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#35401 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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SR-15 BOARD (BVH-2000PS,2180PS/CARD RACK)

IC5E 8-759-901-63 IC SN74LS163AN, TTL.....8-759-911-63 IC SN74S163N, TTL

CHANGED PARTS

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UP TO #35499 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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#35501 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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SY-79 BOARD (BVH-2000PS,2180PS/CARD RACK)

IC1A	NOT IN USE.....	8-759-772-32	IC, EPROM, 2732-77U3-5
IC1C	8-759-764-20 IC, EPROM, 2732-76U3-4.....	8-759-772-31	IC, EPROM, 2732-76U3-5
IC1D	8-759-764-19 IC, EPROM, 2732-75U3-3.....	8-759-772-30	IC, EPROM, 2732-75U3-5
IC1E	8-759-764-18 IC, EPROM, 2732-74U3-3.....	8-759-772-29	IC, EPROM, 2732-74U3-5
IC1G	8-759-764-17 IC, EPROM, 2732-73U3-4.....	8-759-772-28	IC, EPROM, 2732-73U3-5
IC1H	8-759-764-29 IC, EPROM, 2732-72U3-1.....	8-759-772-27	IC, EPROM, 2732-72U3-5
IC1K	8-759-764-13 IC, EPROM, 2732-70U3-4.....	8-759-772-25	IC, EPROM, 2732-70U3-5
IC1I	8-759-764-15 IC, EPROM, 2732-71A3-2.....	8-759-772-33	IC, EPROM, 2732-71A3-5

SY-80 BOARD (BVH-2000PS,2180PS/CARD RACK)

IC1C	8-759-764-23 IC, EPROM, 2732-82U3-3.....	8-759-772-37	IC, EPROM, 2732-82U3-5
IC1D	8-759-764-22 IC, EPROM, 2732-81U3-5.....	8-759-772-36	IC, EPROM, 2732-81U3-6
IC1F	8-759-764-21 IC, EPROM, 2732-80U3-4.....	8-759-772-35	IC, EPROM, 2732-80U3-5

BE-02 BOARD (BVH-2000PS,2180PS/TTP)

C32,33	1-109-573-00 CAP,MICA 470PF 5% 500V.....	1-109-689-00	CAP,MICA 470PF 5% 500V
R80	1-247-823-00 RES,CARBON 470 5% 1/6W.....	1-215-413-00	RES,METAL 470 1% 1/6W
R420	1-247-094-00 RES,CARBON 30 5% 1/4W.....	1-214-096-00	RES,METAL 33 1% 1/4W
R75	1-247-871-00 RES,CARBON 47K 5% 1/6W.....	1-215-461-00	RES,METAL 47K 1% 1/6W
R76	1-247-873-00 RES,CARBON 56K 5% 1/6W.....	1-215-463-00	RES,METAL 56K 1% 1/6W
R18	1-247-887-00 RES,CARBON 220K 5% 1/6W.....	1-215-477-00	RES,METAL 220K 1% 1/6W
R102,202,302,402	1-247-893-00 RES,CARBON 390K 5% 1/6W.....	1-215-415-00	RES,METAL 390K 1% 1/6W
RV10	1-226-277-00 RES,VAR,METAL 10.....	1-230-834-11	RES,VAR,METAL 10
RV1	1-224-934-00 RES,VAR,METAL 100.....	1-230-837-11	RES,VAR,METAL 100
RV2,3,4,5	1-224-936-00 RES,VAR,METAL 500.....	1-230-839-11	RES,VAR,METAL 500
RV9	1-224-936-00 RES,VAR,METAL 20K.....	1-230-844-11	RES,VAR,METAL 20K
TP10(for 04/14 model)	1,2,3,4,5,6,7,8,9, 11,12,13,14,15,16 3-640-328-00	3-657-703-01	TERMINAL,TP

FRONT PANEL ASSY (BVH-2000PS,2180PS)

(BVH-2000PS)			
1pc	A-6004-127-B	PANEL ASSY,REEL.....	A-6004-127-C PANEL ASSY,REEL
(BVH-2180PS)			
1pc	A-6004-146-A	PANEL ASSY,REEL.....	A-6004-146-B PANEL ASSY,REEL
1pc	3-673-971-00	COVER,CAPSTAN.....	3-673-971-02 COVER,CAPSTAN

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UP TO #35399 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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#35401 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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CD-17 BOARD (BVH-2000PS,2180PS/CARD RACK)

TP3 3-657-703-01 TERMINAL,TP.....DELETED

LA-02 BOARD (BVH-2000PS,2180PS/CN PNL)

R42,65 1-247-807-00 RES,CARBON 100 5% 1/6W.....1-215-396-00 RES,METAL 91 1% 1/6W

R41,64,115,215,317,
417(for 04,14)

1-214-132-00 RES,METAL 1K 1% 1/4W.....1-215-421-00 RES,METAL 1K 1% 1/6W

R31,54,105,205,305,
405(for 04,14)

1-214-164-00 RES,METAL 22K 1% 1/4W.....1-215-453-00 RES,METAL 22K 1% 1/6W

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UP TO #35699 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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#35701 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

SW2A 1-516-925-21 SWITCH,DIP,8-CKT.....1-570-623-11 SWITCH,DIP,8-CKT

RV1,13 1-224-943-00 RES,VAR,CERMET 100K.....1-230-846-11 RES,VAR,CERMET 100K

RV3,6,502

1-224-939-00 RES,VAR,CERMET 5K.....1-230-842-11 RES,VAR,CERMET 5K

RV5,8,16

1-224-936-00 RES,VAR,CERMET 500.....1-230-839-11 RES,VAR,CERMET 500

RV9

1-228-288-00 RES,VAR,METAL 100.....1-230-837-11 RES,VAR,METAL 100

RV10,11,15

1-224-941-00 RES,VAR,CERMET 20K.....1-230-844-11 RES,VAR,CERMET 20K

RV12

1-224-942-00 RES,VAR,CERMET 50K.....1-230-845-11 RES,VAR,CERMET 50K

RV14

1-224-937-00 RES,VAR,CERMET 1K.....1-230-840-11 RES,VAR,CERMET 1K

RV501,503

1-224-940-00 RES,VAR,CERMET 10K.....1-230-843-11 RES,VAR,CERMET 10K

CHANGED PARTS

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UP TO #35699 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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#35701 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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VM-01 BOARD (BVH-2000PS,2180PS/CN PNL)

RV1,3	1-224-937-00	RES,VAR,METAL 1K.....	1-230-840-11	RES,VAR,METAL 1K
RV2	1-224-935-00	RES,VAR,METAL 200.....	1-230-838-11	RES,VAR,METAL 200
RV4,6,7,8				
	1-224-936-00	RES,VAR,METAL 500.....	1-230-839-11	RES,VAR,METAL 500

PS-14 BOARD (BVH-2000PS,2180PS/POWER SUPPLY)

RV1,2,3,4,5,6,7,8,9,				
10,11,12,13				
	1-224-940-00	RES,VAR,METAL 10K.....	1-230-843-11	RES,VAR,METAL 10K

RA-05 BOARD (BVH-2000PS,2180PS/TTP)

RV1,6	1-224-939-00	RES,VAR,METAL 5K.....	1-230-842-11	RES,VAR,METAL 5K
RV2,5	1-224-942-00	RES,VAR,METAL 50K.....	1-230-845-11	RES,VAR,METAL 50K

LA-02 BOARD (BVH-2000PS,2180PS/CN PNL)

RV1,2,101,201,301,401(for 04,14)				
	1-224-941-00	RES,VAR,METAL 20K.....	1-230-837-11	RES,VAR,METAL 20K

DD-03 BOARD (BVH-2000PS,2180PS/TTP)

RV1,2	1-228-292-00	RES,VAR,CERMET 2K.....	1-230-841-11	RES,VAR,CERMET 2K
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EQ-02 BOARD (BVH-2000PS,2180PS/CARD RACK)

RV22	1-228-288-00	RES,ADJ,CERMET 100.....	1-230-837-11	RES,ADJ,CERMET 100
RV23,25,28				
	1-228-293-00	RES,ADJ,CERMET 5K.....	1-230-842-11	RES,ADJ,CERMET 5K
RV24	1-228-294-00	RES,ADJ,CERMET 10K.....	1-230-843-11	RES,ADJ,CERMET 10K
RV30	1-228-295-00	RES,ADJ,CERMET 20K.....	1-230-844-11	RES,ADJ,CERMET 20K

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UP TO #35699 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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#35701 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

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MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)

RV2,6,13,21

1-224-939-00 RES,VAR,METAL 5K.....1-230-842-11 RES,VAR,METAL 5K

RV3,22 1-224-940-00 RES,VAR,METAL 10K.....1-230-843-11 RES,VAR,METAL 10K

RV4 1-224-935-00 RES,VAR,METAL 200.....1-230-838-11 RES,VAR,METAL 200

RV7 1-224-936-00 RES,VAR,METAL 500.....1-230-839-11 RES,VAR,METAL 500

RV5 1-224-937-00 RES,VAR,METAL 1K.....1-230-840-11 RES,VAR,METAL 1K

CONNECTOR PANEL ASSY (BVH-2500P)

3pcs 1-509-176-31 RECEP,XLR-3P,MALE.....1-509-176-51 RECEPTACLE 3P,MALE

3pcs 1-509-184-31 RECEP,XLR-3P,FEMALE.....1-509-184-51 RECEPTACLE 3P,MALE

SR-15 BOARD (BVH-2000PS,2180PS/CARD RACK)

TP1,3,4,17,25

3-657-703-01 TERMINAL,TP.....3-693-032-01 TERMINAL,TP

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UP TO #35499 (BVH-2000PS)

UP TO #10799 (BVH-2180PS)

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#35501 & UP (BVH-2000PS)

#10801 & UP (BVH-2180PS)

=====

SY-80 BOARD (BVH-2000PS,2180PS/CARD RACK)

1C1F 8-759-772-35 IC, EPROM,2732-80U3-5.....8-759-776-20 IC, EPROM,2732-80U3-6

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UP TO #35699 (BVH-2000PS)

UP TO #10899 (BVH-2180PS)

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=====

#35701 & UP (BVH-2000PS)

#10901 & UP (BVH-2180PS)

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AP-12 BOARD (BVH-2000PS,2180PS/TTP)

C521,522,523

1-107-158-00 CAP,MICA 30PF 5% 500V.....DELETED

C11,12,13

NOT IN USE.....1-163-168-00 CAP,CHIP CERAMIC 30PF 5% 50V

C511 1-109-677-00 CAP,MICA 150PF 5% 500V.....1-107-173-00 CAP,MICA 150PF 5% 500V

C688 1-123-298-00 CAP,ELECT 470 6.3V.....1-124-472-11 CAP,ELECT 470 20% 10V

C664,C665 (for 04/14 model)

119,120,219,220,319,

320,504,505,507,508,

604,605,624,625,644,

645 1-123-318-00 CAP,ELECT 33 16V.....1-124-896-00 CAP,ELECT 33 20% 16V

CHANGED PARTS

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UP TO #35699 (BVH-2000PS)
UP TO #10899 (BVH-2180PS)
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=====

#35701 & UP (BVH-2000PS)
#10901 & UP (BVH-2180PS)
=====

(AP-12 BOARD BVH-2000PS,2180PS/TTP)

C404,670,673(for 04/14 model)

104,204,304,610,613,

630,633,650,653,684,

685 1-123-332-00 CAP,ELECT 47 25V.....1-124-477-11 CAP,ELECT 47 20% 25V

C410,411(for 04/14 model)

1,2,110,111,210,211,

310,311

1-123-333-00 CAP,ELECT 100 25V.....1-124-445-00 CAP,ELECT 100 20% 16V

C689 1-123-356-00 CAP,ELECT 10 50V.....1-124-907-00 CAP,ELECT 10 20% 50V

RY401(for 04/14 model)

101,201,301

1-515-309-00 RELAY,5V 200-OHM.....1-515-518-00 RELAY,5V

RY501 1-515-309-21 RELAY,12V 1K-OHM.....1-515-477-00 RELAY,12V

EQ-02 BOARD (BVH-2000PS,2180PS/CARD RACK)

JP1,2,3 1-560-733-00 PIN,SHORT.....1-566-385-11 PIN,CONNECTOR 2P
2pcs 1-561-832-00 PLUG,SHORT.....1-563-859-11 RECEPTACLE,CONNECTOR 2P

MD-14 BOARD (BVH-2000PS,2180PS/CARD RACK)

JP1,2,3,4,5,6
1-560-733-00 PIN,SHORT.....1-566-385-11 PIN,CONNECTOR 2P
JP1,4,5 1-561-832-00 PLUG,SHORT.....1-563-859-11 RECEPTACLE,CONNECTOR 2P

LG-02(A) BOARD (BVH-2000PS,2180PS/CARD RACK)

JP1,2,3,4,5,6,7,8,9
1-560-733-00 PIN,SHORT.....1-566-385-11 PIN,CONNECTOR 2P
2pcs 1-561-832-00 PLUG,SHORT.....1-563-859-11 RECEPTACLE,CONNECTOR 2P

SY-79 BOARD (BVH-2000PS,2180PS/CARD RACK)

JP1,2,3,4,5,6
1-560-733-00 PIN,SHORT.....1-566-385-11 PIN,CONNECTOR 2P
3pcs 1-561-832-00 PLUG,SHORT.....1-563-859-11 RECEPTACLE,CONNECTOR 2P

=====

UP TO #35699 (BVH-2000PS)

UP TO #10899 (BVH-2180PS)

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#35701 & UP (BVH-2000PS)

#10901 & UP (BVH-2180PS)

=====

LA-02 BOARD (BVH-2000PS,2180PS/CN PNL)

JP101,102,103,104,105,
106,107,201,202,203,
204,205,206,207,301,
302,303,304,305,306,
307 1-560-733-00 PIN,SHORT.....1-566-385-11 PIN,CONNECTOR 2P

12pcs 1-561-832-00 PLUG,SHORT.....1-563-859-11 RECEPTACLE,CONNECTOR 2P

=====

UP TO #35799 (BVH-2000PS)

UP TO #10899 (BVH-2180PS)

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=====

#35801 & UP (BVH-2000PS)

#10901 & UP (BVH-2180PS)

=====

LEVEL CONTROL PANEL (BVH-2000PS,2180PS)

1pc 1-520-451-00 METER,VIDEO/RF.....1-520-451-12 METER,VIDEO/RF

3pcs 1-520-450-00 METER,VU.....1-520-451-12 METER,VU

=====

UP TO #35699 (BVH-2000PS)

UP TO #10899 (BVH-2180PS)

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=====

#35701 & UP (BVH-2000PS)

#10901 & UP (BVH-2180PS)

=====

SR-15 BOARD (BVH-2000PS,2180PS/CARD RACK)

C112 NOT IN USE.....1-107-206-00 CAP,MICA 15PF 5% 500V

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UP TO #35799 (BVH-2000PS)

UP TO #10899 (BVH-2180PS)

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=====

#35801 & UP (BVH-2000PS)

#10901 & UP (BVH-2180PS)

=====

AU-27 BOARD (BVH-2000PS,2180PS/CARD RACK)

C108,208
1-109-553-00 CAP,MICA 470PF 5% 100V.....1-130-467-00 CAP,MYLAR 470PF 5% 50V

C119,137,151,219,237,
251 1-109-559-00 CAP,MICA 820PF 5% 100V.....1-130-470-00 CAP,MYLAR 820PF 5% 50V

CHANGED PARTS

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UP TO #35999 (BVH-2000PS)
UP TO #10999 (BVH-2180PS)
=====

=====

#36001 & UP (BVH-2000PS)
#11001 & UP (BVH-2180PS)
=====

DM-25 BOARD (BVH-2000PS,2180PS/CARD RACK)

R519	1-215-462-00	RES,METAL 51K 1% 1/6W.....	1-215-464-00	RES,METAL 62K 1% 1/6W
R517	1-215-474-00	RES,METAL 160K 1% 1/6W.....	1-215-476-00	RES,METAL 200K 1% 1/6W

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UP TO #35999 (BVH-2000PS)
UP TO #11099 (BVH-2180PS)
=====

=====

#36001 & UP (BVH-2000PS)
#11101 & UP (BVH-2180PS)
=====

SY-79 BOARD (BVH-2000PS,2180PS/CARD RACK)

IC1K	8-759-772-25	IC,EPROM,2732-70U3-5.....	8-759-778-55	IC,EPROM,2732-70U3-6
IC1C	8-759-772-31	IC,EPROM,2732-76U3-5.....	8-759-778-56	IC,EPROM,2732-76U3-6

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UP TO #36099 (BVH-2000PS)
UP TO #11499 (BVH-2180PS)
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=====

#36101 & UP (BVH-2000PS)
#11501 & UP (BVH-2180PS)
=====

FRAME (BVH-2000PS,2180PS)

H3	8-825-737-10	HEAD,AUDIO R/P,PA77-5104C.....	8-825-771-01	HEAD PA77-5104F
H4	8-825-737-20	HEAD,AUDIO MONITOR,PA77-5104D.....	8-825-771-01	HEAD PA77-5104F

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UP TO #36999 (BVH-2000PS)
UP TO #11599 (BVH-2180PS)
=====

=====

#37001 & UP (BVH-2000PS)
#11601 & UP (BVH-2180PS)
=====

SY-79 BOARD (BVH-2000PS,2180PS/CARD RACK)

3pcs	1-563-859-11	RECEPTACLE, CONNECTOR 2P.....	1-565-413-11	RECEPTACLE, CONNECTOR 2P
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UP TO #35999 (BVH-2000PS)
UP TO #11499 (BVH-2180PS)
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=====

#36001 & UP (BVH-2000PS)
#11501 & UP (BVH-2180PS)
=====

BE-03 BOARD (BVH-2000PS-04,14/BVH-2180PS-04,14)

Q17,18,19,20	8-729-606-32	TRANSISTOR 2SC2603.....	8-729-600-27	TRANSISTOR 2SC634-7
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UP TO #36199 (BVH-2000PS)
UP TO #11799 (BVH-2180PS)

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=====

#36201 & UP (BVH-2000PS)
#11801 & UP (BVH-2180PS)

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DD-03 BOARD (BVH-2000PS, 2180PS/TTP)

Q4, 8, 9, 12

8-763-420-00 TRANSISTOR 2SC1762.....8-729-141-78 TRANSISTOR 2SC3632-K

Q5, 16, 17

8-765-141-00 TRANSISTOR 2SA911.....8-729-118-43 TRANSISTOR 2SA1413-L